



® ADEMCO

2-Partitioned Security System

VISTA-40

**This Control Supports the Ademco
2-Way Voice Interface Module (VIM)
For Audio Alarm Verification (AAV)**

Installation Instructions • Installation Instructions • Installation Instructions

N7001-INSTV2 6/97,
Part of N7001V2

RECOMMENDATIONS FOR PROPER PROTECTION

The Following Recommendations For The Location Of Fire And Burglary Detection Devices Help Provide Proper Coverage For The Protected Premises.

Recommendations For Smoke And Heat Detectors

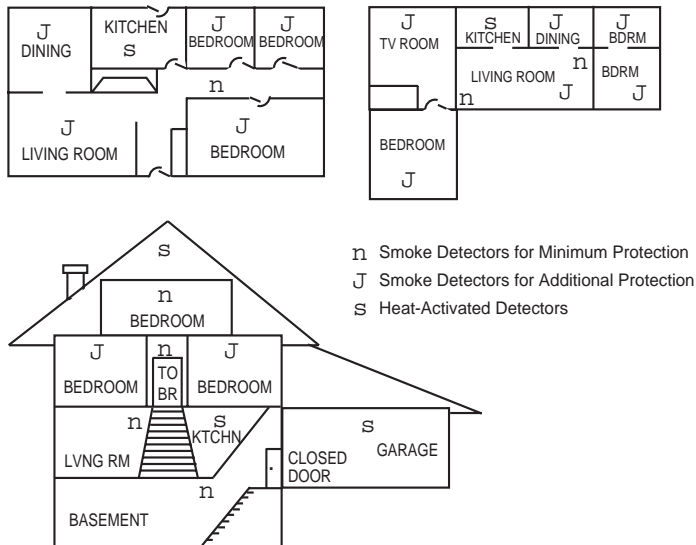
With regard to the number and placement of smoke/heat detectors, we subscribe to the recommendations contained in the National Fire Protection Association's (NFPA) Standard #72 noted below.

Early warning fire detection is best achieved by the installation of fire detection equipment in all rooms and areas of the household as follows: For minimum protection a smoke detector should be installed outside of each separate sleeping area, and on each additional floor of a multi-floor family living unit, including basements. The installation of smoke detectors in kitchens, attics (finished or unfinished), or in garages is not normally recommended.

For additional protection the NFPA recommends that you install heat or smoke detectors in the living room, dining room, bedroom(s), kitchen, hallway(s), attic, furnace room, utility and storage rooms, basements and attached garages.

In addition, we recommend the following:

- Install a smoke detector inside every bedroom where a smoker sleeps.
- Install a smoke detector inside every bedroom where someone sleeps with the door partly or completely closed. Smoke could be blocked by the closed door. Also, an alarm in the hallway outside may not wake up the sleeper if the door is closed.
- Install a smoke detector inside bedrooms where electrical appliances (such as portable heaters, air conditioners or humidifiers) are used.
- Install a smoke detector at both ends of a hallway if the hallway is more than 40 feet (12 meters) long.
- Install smoke detectors in any room where an alarm control is located, or in any room where alarm control connections to an AC source or phone lines are made. If detectors are not so located, a fire within the room could prevent the control from reporting a fire or an intrusion.



UL This control complies with National Fire Protection Association (NFPA) requirements for temporal pulse sounding of fire notification appliances.

Recommendations For Proper Intrusion Protection

For proper intrusion coverage, sensors should be located at every possible point of entry to a home or commercial premises. This would include any skylights that may be present, and the upper windows in a multi-level building.

In addition, we recommend that radio backup be used in a security system so that alarm signals can still be sent to the alarm monitoring station in the event that the telephone lines are out of order (alarm signals are normally sent over the phone lines, if connected to an alarm monitoring station).

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Use Part 2 when programming. It provides detailed programming procedures and descriptions of all data fields. It also provides procedures for using #93 Menu Mode.

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NOTE: UNLESS OTHERWISE STATED, MODEL NUMBERS FOR DEVICES ARE ADEMCO MODEL NUMBERS.

PART 1

INSTALLATION INSTRUCTIONS

Section 1. GENERAL INFORMATION

SUMMARY OF SYSTEM FEATURES

The VISTA-40 Control is a microprocessor based, programmable, partitioned system, and features EEROM memory technology (power loss does not result in the loss of programmed data).

Before installing this partitioned system, become completely familiar with the partitioning concepts, including zone distribution (each zone can be assigned to only one partition), output relay features, user code usage and authority levels, and the user-friendly menu mode of programming.

NOTE: Throughout this manual, the term "alpha keypad" refers equally to the 6139 alpha keypad or 6139AV voice/alpha keypad.

The following lists the major features of the VISTA-40 system.

System Features

Zones Supported

- Supports up to 9 traditional wired zones of protection.
- Expandable to 64 zones using combinations of 2-wire polling loop devices, and/or 5700 or 5800 series wireless transmitters. Supports 4281 or 5881 (5882 in Canada) series wireless receivers.
- Zones can be distributed among 2 logical partitions of operation.
- Supports up to sixteen 2-wire smoke detectors (zone 1).
- Other zones can be fire zones using 4-wire smoke and heat detectors and/or polling loop detectors.
- Supports up to 50 latching type 2-wire glass break detectors on zone 8.

Audio Alarm Verification (AAV)

- This option allows the central station to "listen-in" at the premises during an alarm, when used with the optional Ademco 2-Way Voice Interface Module (VIM) and at least one 6139AV 2-way Voice keypad (up to six can be used). After an alarm report is successfully sent to the central station, the local alarm sounder is automatically silenced and a trigger can be activated by the central station operator allowing the operator to hear what is happening at the premises and speak directly to persons on the premises via the microphone and speaker built into the 6139AV keypad.

Phone Access And Voice Response

- The VISTA-40 supports the optional 4285 Phone Module. The 4285 is not permissible in UL installations. This add-on accessory permits phone access to the security system for arming/disarming and for performing most function commands using the telephone keypad, with voice annunciation being provided over the phone as confirmation after any function command entered.

Note: The phone module can be installed in either partition, and can be used to control the other partition using the GOTO command.

Output Control

- Supports up to 8 output devices (optional 4204 relays or X-10 devices) that can be activated by system events. *The X-10 devices are not UL Listed for fire and burglary applications.*

Addressable Devices

- Supports up to sixteen addressable devices (any combination of remote keypads, RF receivers and relay output modules).

Keypads

- Supports the following remote keypads: Ademco 6128, 6137, 6139, 6139AV[†].
† For use with the Ademco VIM module.

Keyswitch

- Supports the 4146 keyswitch.

User Codes

- Supports up to 70 user allocations, maximum of 69 in a given partition, each with various levels of authority.

Keypad Panic Keys

- Provides 3 keypad panic functions.

Global Arming

- Allows users to easily arm both partitions via keypad prompts.

Quick Bypass (Forced Bypass)

- Quick (forced) bypass feature bypasses all faulted zones with single key entry sequence.

Memory-Of-Alarm

- Memory-of-alarm feature, which, upon disarming the system, automatically displays all zones that were in an alarm condition while the system was armed.

Circuit Breakers

- Self-resetting circuit breaker protection eliminates the need to replace blown cartridge fuses.

Built-in Users Manual

- Built-in Users Manual (6139, 6139AV only). By depressing and holding any of the function keys on the keypad for 5 seconds, a brief explanation of that function will scroll across the alpha-numeric display.

Descriptors

- All programmed descriptors can be displayed (one at a time) by pressing and holding the READY key for 5 seconds, then releasing the key. This serves as a check for installers to be sure all descriptors are entered properly.

Event Logging

- Event Logging feature keeps record of up to 100 events.

Access Control

- Provides user-activated access control command which pulses a relay output for controlled opening of access doors (e.g. lobby door).

#70 End User Relay Commands

- Allows end users to manually turn on/off relay/X-10 module outputs to control lights or other devices via keypad or phone module.

Cabinet

- Large cabinet with removable door for easier installations.

Programming Features

- Programming can be performed at the office prior to installation, or on the job site directly from the keypad.
- Can be downloaded from a remote location or at the job site (using a PC/laptop with 4100SM Serial Module) by using the Ademco's V-Link[®] downloading software (Rev. 4 or higher) or Ademco's *Compass* Windows downloading software.
- The Control is pre-programmed with a set of standard values that is designed to meet the needs of many installations. These values, however, can be changed to suit the needs of any particular installation.
- The Control can also be pre-programmed by the installer with one of four standard communication default programming values, thus further saving time and effort.

Installer Code

- Installer code override feature. Installer code will disarm system only if it was used to arm the system.

Prohibit Program Mode Entry

- If desired, entry to program mode via [*] + [#] within 30 seconds of power up can be disabled.

Alpha Descriptors

- All zones and partitions can be assigned descriptions.
- The letter "s" or " 's " can be added to descriptors.

Relay Voice Descriptors

- Separate vocabulary for annunciating relay output descriptors when using a phone module to activate relays.

Custom Words

- Up to 20 custom words can be added to the built-in vocabulary.

Voice Substitute Custom Words

- Provides a means of annunciating substitute words for the phone module whenever a custom word is used for alpha keypad displays.

Downloading

- Direct wire downloading can be done without a modem, by using a PC or Laptop computer and 4100SM Module.

#93 Menu Mode

- Easy programming of zones using the user friendly #93 Menu Mode.

Communication Features

Communication

- Ademco low speed, SESCOA/RADIONICS, Ademco Express, Ademco High Speed, Ademco Contact ID.

Comm. Fields

- Easy programming for communication fields. Simply enter the report code for each zone.

Comm. Defaults

- Communication defaults can be loaded anytime, and does not affect non-communication program fields.

Zone Reports

- All 64 zones can report to a central station using any standard reporting format.

Callback

- Callback defeat option for downloading.

Real-Time Clock

- Real-Time clock for time related functions.
NOTE: 6139 or 6139AV alpha keypad must be used to set clock, or it can be set using Downloader software.

AC Loss Reporting

- Random AC Loss and AC Restore reporting option sends report randomly from 10-40 minutes after AC loss, to help prevent central stations from receiving an overload of reports due to area blackouts.

Test Reporting

- Intelligent test reporting option means test reports will not be sent if any other report was sent within the programmed test report interval.

Split/Dual Reporting

- Split/Dual reporting communicator options available.

Cancel Report

- Option to allow a cancel report to be sent, even after Bell Time-out has ended.

Voltage Triggers

- Used to interface with LORRA or other devices.
- PC Downloader can command output voltage triggers to pulse on for 2 seconds.

Phone Numbers

- Primary and secondary phone number capability.
- Can program different formats for each phone number.

INTRODUCTION TO THE PARTITIONED SYSTEM

Basic Partitioning Features

The following lists the partitioning features of the VISTA-40 system.

Simple, Secure, Reliable

- Easy to use and program as the simplest alarm system.
- Integrity of security is not compromised for any users of the system.
- Inherent reliability of the partitioned system is equal to a stand-alone alarm system if purchased separately.

Keypads

- Flexible number of keypads per partition (up to a total of 16 in a system (exclusive of other ECP devices and auxiliary power requirements), any way you want to assign them).
- Appropriate sounds and messages to assigned keypads only (each system appears to be independent to users).
- Ability to inhibit other keypads from accessing your partition (total security in a strip mall environment).

User Codes

- 70 User Codes assigned virtually anyway you want them (69 max. in any one partition, otherwise no

restrictions). Enough to handle the largest commercial jobs

- Multiple levels of authority per partition (allows key people in a partition to have complete control and limit system tampering by others).

Partitions

- Any zone can be assigned to any particular partition (easy to install, allows logical assignment by the dealer).
- "GOTO" function provides access to the other partition (ideal for executive access to factory for example).
- Intelligent partition/zone menu programming help (simplifies the programming and reduces errors)
- Programmable 4-character partition name displayed on alpha keypads when needed (no need to memorize numbers – name and number are shown for you).

Global Partitioning Features and Resources

In any system, certain physical system components and features are shared by all partitions or assigned to a specific partition. The following elements are shared or assignable to a specific partition:

	Shared By All Partitions	Assignable To One Partition
Dialer	4	
Alarm Relay/Sounder	4	4 (using relay outputs)
Power Supply	4	
Wireless Keypad		4
Keyswitch Station		4

In addition to the physical devices which are shared, the system shares some software features on a global basis as well. These include:

- Panic Code ReportsCommon code for any partition
- Low Battery ReportingReports as Partition 1
- AC Power Reporting OptionsReports as Partition 1
- Test Reporting IntervalGlobal for the Panel
- Download Phone NumberGlobal for the Panel
- Communication FormatGlobal for the Panel
- Rotary/Touch ToneGlobal for the Panel
- Download Callback defeatGlobal for the Panel
- Installer CodeGlobal for all Partitions

Partition Specific Features

Many devices and functions are reserved on a partition basis to provide proper operation and flexibility for installations. The items assignable on a per partition basis include:

- Keypads
- Entry and Exit Delays
- Keypad Sound during Exit Delay
- Primary Subscriber Number
- Secondary Subscriber Number
- Enable/Disable of Panic Keys
- Enable/Disable of Duress
- Multiple Alarm Reporting
- Quick Arm enable/disable
- Enable/Disable Chime Mode
- "Go To" Partition function
- Swinger Suppression
- Burglary Alarm Comm. Delay
- Open/close for Installer Code
- Confirmation of Arming Ding
- Alarm Sounder Duration
- User Codes
- Inhibit Bypass of one Zone

Section 2. INSTALLING THE CONTROL

MOUNTING THE CABINET

General The VISTA-40 is supplied with a 12.5"W x 14.5"H x 3"D cabinet suitable for use in residential and non-certified commercial burglary installations.

Mount the Control cabinet to a sturdy wall using fasteners or anchors (not supplied) in a clean, dry area which is not readily accessible to the general public. The back of the Control cabinet has 4 holes for this purpose.

Follow the instructions below for mounting the VISTA-40 PC board into the cabinet and for mounting the Control's lock to its cabinet door.

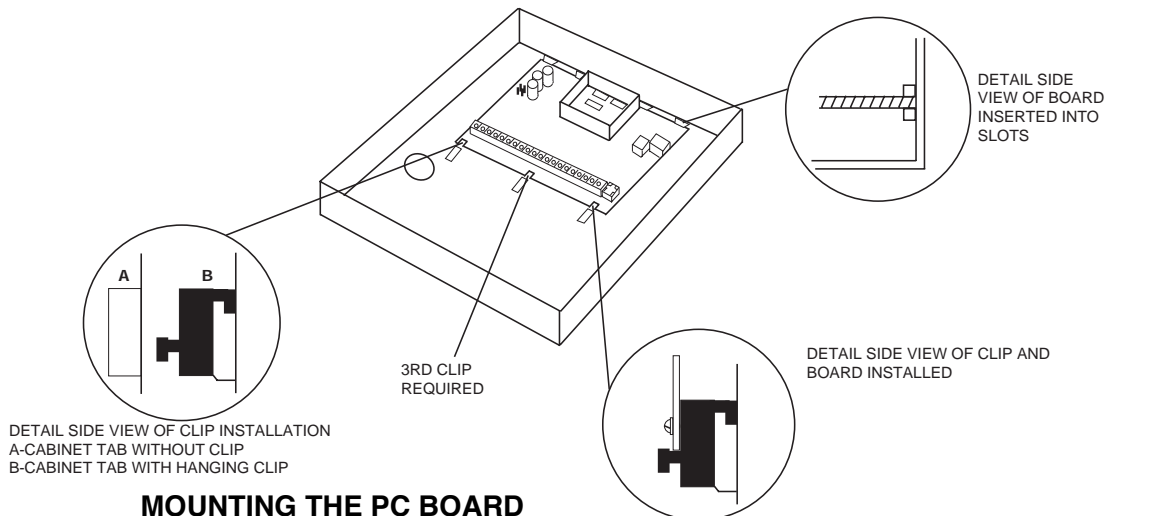
Mounting The PC Board

Before mounting the circuit board, be certain that the appropriate metal knockouts have been removed. **Do not attempt to remove the knockouts after the circuit board has been installed.**

1. Hang the three mounting clips on the raised cabinet tabs. Observe proper clip orientation to avoid damage to the clip when mounting screws are tightened and to avoid problems with insertion and removal of the PC board.
2. Insert the top of the circuit board into the slots at the top of the cabinet. Make certain that the board rests in the slots as indicated in step 2 detail.
3. Swing the base of the board into the mounting clips and secure the board to the cabinet with the accompanying screws (as illustrated in step 3 detail).

Advisory

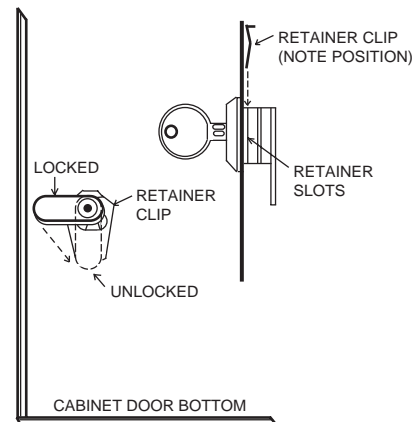
Make certain that the mounting screws are reasonably tight to ensure that there is a good ground connection between the PC board and the cabinet. Also, dress field wiring away from the microprocessor (center) section of the PC board. The cabinet provides 2 loops on its left and right sidewalls for anchoring field wiring using tie wraps. These steps are important to minimizing the risk of panel RF interference with television reception.



MOUNTING THE PC BOARD

Installing the Lock

1. Remove the lock knockout on the control cabinet cover. Insert the key into the lock. Position the lock in the hole making certain that the latch will make contact with the latch bracket when the door is closed.
2. While holding the lock steady, insert the retainer clip into the retainer slots.
3. Hold the lock steady, and insert the retainer clip into the retainer slots. Position the clip as illustrated in order to permit easy removal.



PHONE LINE CONNECTIONS

Standard Phone Line Connections

IMPORTANT!: If using a 4285 Phone Module, phone connections **must** be made exactly as shown in the *PHONE MODULE* section, even if the system is not programmed to communicate with a monitoring station. **The 4285 Phone Module will not function unless the system is wired exactly as described.**

Incoming phone line and handset wiring is connected to the main terminal block as follows (refer to Diagram below):

- TB1-26: Local Handset (TIP)
- TB1-27: Local Handset (RING)
- TB1-28: Incoming Phone Line (TIP)
- TB1-29: Incoming Phone Line (RING)

Warning: To prevent the risk of shock, disconnect phone lines at telco jack before servicing the panel.

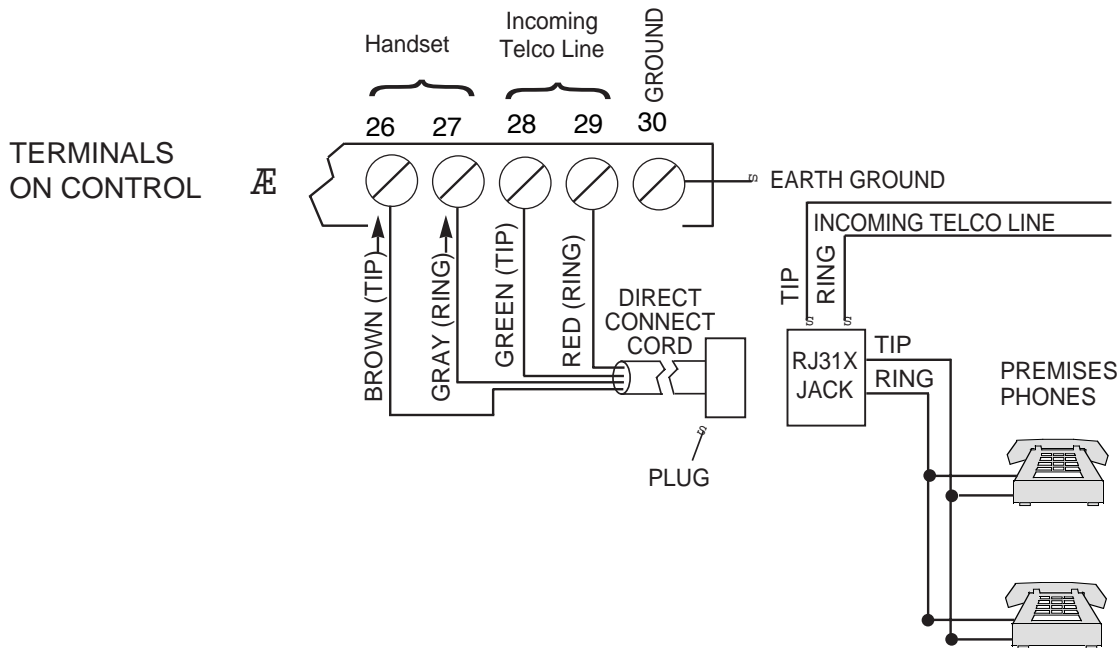
If you want to connect the control panel to phone lines that require ground start capability, you must use a 675 Ground Start Module must be used. This module is triggered by one of the outputs on the connector labeled J7 (see *VOLTAGE TRIGGERS* section).

Voice Interface Module (VIM)

Be sure to connect the VIM unit to the control's handset terminals 26 and 27. Refer to the *2-WAY VOICE KEYPADS AND AUDIO ALARM VERIFICATION* section later in this manual for wiring diagram.

PABX

If the communicator is connected to a telephone line inside a PABX, be sure the PABX has a back-up power supply that can support the PABX for 24 hours. Many PABXs **are not** power backed up and connection to such a PABX will result in a communication failure if power is lost.



STANDARD PHONE LINE CONNECTIONS

Section 3. POWERING THE SYSTEM

Primary Power Power to the Control panel is supplied by model No. 1361* Plug-in Transformer which is rated at 16.5VAC, 40VA. Caution must be taken when wiring this transformer to the panel to guard against blowing the fuse inside the transformer (non-replaceable).

* NOTE: Use 1361CN Transformer in Canadian installations.

Back-Up Power In the event of an AC power loss, the Control panel is supported by a back-up, rechargeable gel cell battery. Ademco 467 (12V, 4AH), YUASA NP4-12 (12V, 4AH) and NP7-12 (12V, 7AH) batteries are recommended. **Do not use Gates batteries.**

The standby battery is automatically tested every 24 hours, beginning 24 hours after exiting programming mode. In addition, entry into the test mode will cause a battery test to be initiated.

Battery Standby Table

AUX. STANDBY CURRENT DRAW				
AMP-HRS.	200mA	400mA	600mA	750mA
4.0	6 hrs.	4 hrs.	3 hrs.	2.5 hrs.
6.0-7.0	11 hrs.	7 hrs.	5.5 hrs.	4 hrs.

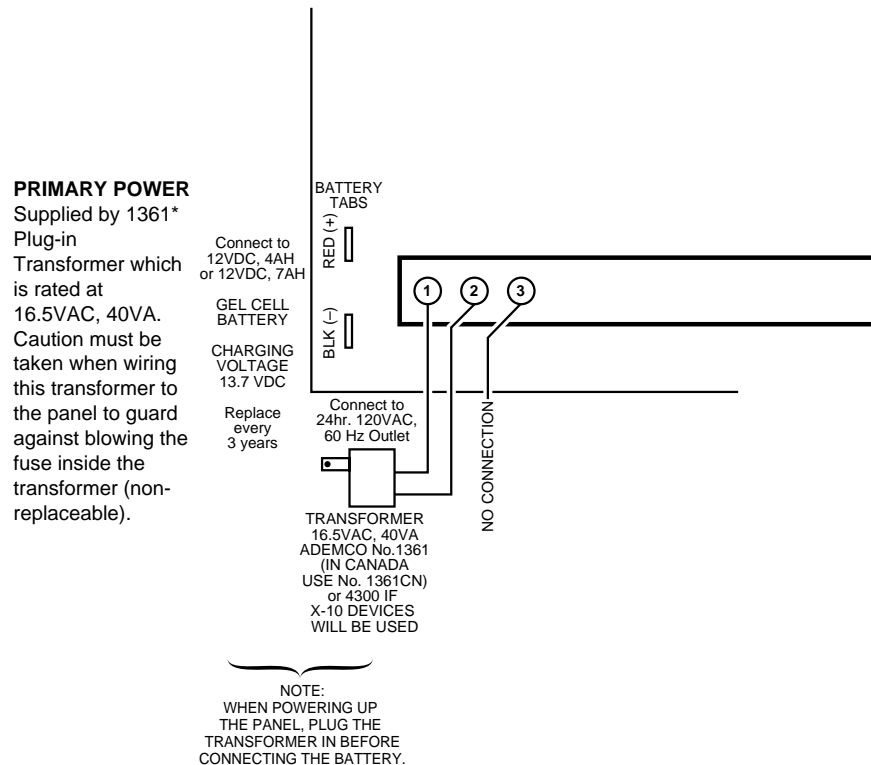
NOTE: These figures are approximate, and may vary depending upon the age, quality, and capacity of the battery at the time of the AC loss.

Earth Ground Connections

In order for the lightning transient protective devices in this product to be effective, the designated earth ground terminal must be terminated in a good earth ground. The following are examples of good earth grounds available at most installations:

Metal Cold Water Pipe: Use a non-corrosive metal strap (copper is recommended) firmly secured to the pipe to which the ground lead is electrically connected and secured.

AC Power Outlet Ground: Available from 3-prong, 120VAC, power outlets only. To test the integrity of the ground terminal, use a three-wire circuit tester with neon lamp indicators, such as the UL-Listed Ideal Model 61-035, or equivalent, available at most electrical supply stores.



AC POWER AND BATTERY CONNECTIONS

Power-Up Procedure

1. Fill out the Polling Loop Current Draw and Auxiliary Device Current Draw Worksheets shown below. Make sure that the currents drawn from these outputs do not exceed their respective ratings.
CAUTION: Failure to observe the polling loop current rating will cause a polling loop malfunction. Failure to observe the auxiliary output current rating will result in a battery which does not charge properly, or possibly a tripped circuit breaker.
2. Wire the 1361 transformer (1361CN in Canada) to terminals 1 & 2 on the control panel (before connecting the battery), as shown in the SUMMARY OF CONNECTIONS diagram. **Do not plug in at this time.**
3. Connect all polling loop and auxiliary devices, such as keypads, PIRs, etc.
4. Plug the transformer into a 24-hour, uninterrupted AC outlet. After a few seconds, the green READY LED on the keypad(s) should light and the keypad(s) should display DISARMED READY TO ARM (Alpha keypads), or READY (Fixed-word keypads).
5. Connect the battery to the battery tabs on the control board using the battery cables supplied (use Red for + to +, Black for - to -). See the SUMMARY OF CONNECTIONS diagram.

POLLING LOOP CURRENT DRAW WORKSHEET

RPM DEVICE	CURRENT	# UNITS	TOTAL CURRENT
998MX PIR	1mA		
4191SN Contact	1mA		
4194 Contact	1 mA		
4192SD Photo Smoke	0.4 mA		
4192SDT Smoke w/Heat	0.4 mA		
4192CP Ionization Detector	0.4 mA		
4275 Dual Element PIR	1 mA		
4278 Quad Element PIR	1 mA		
4190WH 2-Zone RPM	1 mA (LOW) 2 mA (HIGH)		
4208 8-Zone RPM	16 mA		
4278EX-SN PIR	1mA		
4939SN Contact	1mA		
4959SN Contact	1mA		
TOTAL CURRENT *			

* If the total current draw exceeds 64 mA, a 4197 Loop Extender module must be used.

AUXILIARY DEVICE CURRENT DRAW WORKSHEET

DEVICE	CURRENT	# UNITS	TOTAL CURRENT
6128 Keypad	30mA		
6137 Keypad	85mA		
6139 Keypad	100mA		
6139AV Keypad	200mA		
675 Ground Start Module	50 mA		
Built-in Polling Loop	(total poll loop worksht)		
4281 RF Receiver	35mA		
5881 RF Receiver	60mA		
4197 Poll Loop Extender	80 mA†		
4204 Relay Module	15mA standby 40mA per active relay		
VIM Voice Interface Module.	80mA		
*			
*			
TOTAL CURRENT (750mA max)			

* If using hard-wire devices such as PIRs, refer to the specifications for that particular unit's current draw.

† Only applies if powered from Control's auxiliary power.

Section 4. INSTALLING REMOTE KEYPADS

General The Control supplies up to 750 mA of auxiliary power for remote keypads, polling loop devices and/or other auxiliary devices such as motion detectors or 4-wire smoke detectors*.

The Control supports, independent of auxiliary power considerations, up to 16 addressable remote keypads (6128, 6137, 6139, 6139AV†). Note that since the maximum number of addressable devices connected to the keypad lines is 16, usage of non-keypad devices (ex. 4204, 4281, 5881) reduces the number of keypads that can be supported.

Keypads can be powered from the auxiliary power output provided that the total current drawn from this output does not exceed 750 mA. Keep this in mind when adding remote keypads so you don't overdraw current from the panel. This would result in a battery which does not charge properly or possibly a tripped auxiliary solid state circuit breaker.

If the auxiliary load is determined to be greater than 750 mA, then additional keypads can be powered from a separate power supply. Refer to the "Powering Additional Keypads" paragraph for a diagram that shows how to make connections to the separate power supply.

* **4-wire smoke detectors cannot be used in UL Listed applications.**

† The control supports the VIM Voice Interface Module (connected to the control's keypad terminals), which supports up to six 6139AV 2-way voice keypads per system. Refer to the 6139AV KEYPAD paragraph later in this section.

Programming The Keypads

The keypads can be set for a device address of 00–15

IMPORTANT! You **must** select a device address of 00, 01, 02, or 03 if standard defaults are to be programmed, since these are the only keypad addresses enabled by the standard default. Instructions for setting a keypad address are provided with each keypad, and in the "Setting the Keypad Address" paragraph on the next page.

Keypads must also be programmed for type, partition number and keypad sounder suppression options. In addition, 6139AV 2-way voice keypads require the programming of a VIM keypad number, which refers to the keypad's ID number when controlled by a central station operator during a 2-way voice session.

For instructions, refer to Section 4: #93 MENU MODE–DEVICE PROGRAMMING in **PART 2. PROGRAMMING PROCEDURES.**

Mounting The Keypads

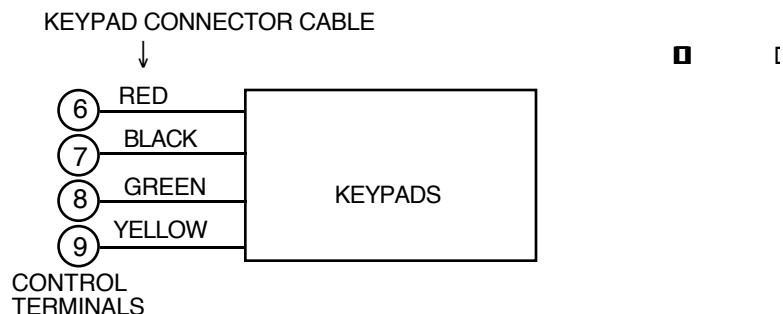
Note that field wiring to the keypads must be completed before the keypads can be mounted.

The keypads can be either surface mounted directly to a drywall, or to a single or double gang electrical box, or flush mounted (using Trim Ring Kit 5137TRK or 6139TRK). Refer to the mounting instructions and template included with the keypad and/or trim ring kit for specific information.

Be sure to take the height of the users into account when mounting keypads.

Wiring Keypads

Connect keypads to the control's keypad terminals 6–9 as shown below and in the Summary Of Connections diagram at the end of this manual.



KEYPAD CONNECTIONS

Keypads may be wired to a single wire run or individual keypads may be connected to separate wire runs. The maximum wire run length from the panel to a keypad which is homerun back to the panel must not exceed the following:

Wire Gauge	Maximum Length
#22 gauge	450 feet
#20 gauge	700 feet
#18 gauge	1100 feet
#16 gauge	1750 feet

NOTE: The length of all wire runs combined must not exceed 2000 feet when unshielded quad conductor cable is used (1000 feet if shielded cable is used.)
If more than one keypad is wired to a run, then the above maximum lengths must be divided by the number of keypads on the run (i.e. the maximum length would be 225 feet if two keypads are wired on a #22 gauge run).

Setting the Keypad Address

To set the keypad's address, do the following:

- Enter the address mode:** Power-up (plug-in) the keypad. Within 60 seconds of system power-up, press and hold down the [1] and [3] keys at the same time for 3 seconds. (If unable to enter address mode, power-up and try again.)
The current keypad address will be displayed, and the cursor will be under the "tens" digit. If 10 seconds have passed with no key entry, the keypad automatically exits address mode. You must then power down, power-up and start address mode again.
Note: The keypad will not enter address mode if the panel to which it is connected is in programming mode.
- Set the current address to "00":** Press [0] to clear the current "tens" digit. The cursor will move to the "ones" digit position. Press [0] to clear the current "ones" digit. The cursor will move back to the "tens" digit position.
- Enter the keypad's address:** Enter the proper "tens" digit of the keypad's address. The cursor will move to the "ones" digit position. Enter the proper "ones" digit of the keypad's address.
Note that address "31" sets the keypad to the non-addressable mode.
- Exit the address mode:**
Press [*] to save the displayed address and exit address mode.
Note: If 10 seconds passes with no key entry, the keypad automatically exits address mode.

Viewing the Keypad Address

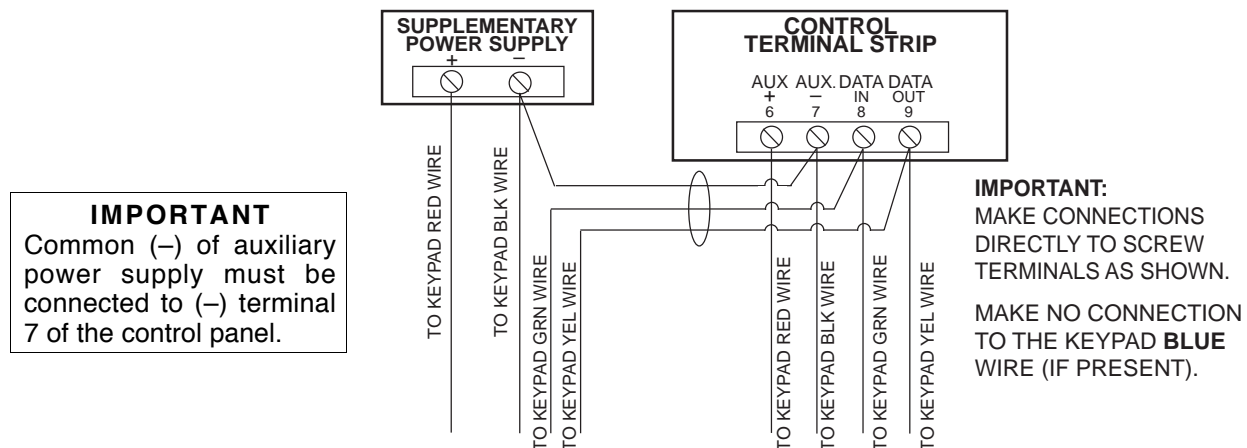
Press and hold down the [1] and [3] keys at the same time for about 3 seconds. The current address will be displayed. No key entry is allowed in this mode. Press any key to exit or wait 10 seconds to exit the viewing mode.

Powering Additional Keypads

Up to five (5) 6139 keypads can be powered from the auxiliary power output provided that the 750mA rating is not exceeded. The backup battery will supply power to these keypads in the event that AC power is lost.

Additional keypads, up to the system maximum of 16, can be connected to the system by using a regulated, 12VDC power supply (e.g., 488-12 supplies 12V, 500mA). Use a UL Listed, battery-backed supply for UL installations.

Connect additional keypads as shown below, using the keypad wire colors shown. Make sure to observe the current ratings for the power supply used.



POWERING ADDITIONAL KEYPADS

6139AV 2-Way Voice Keypads

The control supports the VIM Voice Interface Module, which can support up to six 6139AV 2-way voice keypads. These keypads feature a built-in microphone and speaker that allows a central station operator to "listen-in" and/or speak to persons at the protected premises after an alarm has occurred. Note that during this "listen-in" and/or "speak" period, all alarms will be temporarily silenced. Refer to the *2-WAY VOICE KEYPADS AND AUDIO ALARM VERIFICATION* section later in this manual for details on wiring and using the VIM module and 6139AV keypads.

6139AV Audio Connection

In addition to the 4-wire connection to the control's keypad terminals, the 6139AV requires a shielded 2-wire connection to a VIM Voice Interface Module. This information is provided in the *2-WAY VOICE KEYPADS AND AUDIO ALARM VERIFICATION* section.

Voice Interface Module (VIM) Connection

The VIM connects to the control's keypad terminals in the same manner as any other keypad. The VIM requires a device address to be set using its DIP switches, and requires programming using the #93 Menu Mode–Device Programming. Refer to the *2-WAY VOICE KEYPADS AND AUDIO ALARM VERIFICATION* section for connection and programming information.

Section 5. ZONE CONFIGURATIONS

BASIC 9 HARD-WIRED ZONES

General Information

Zones 1-9 are reserved for traditional hard-wired devices. The following table summarizes zone usage.

Zone 1	EOLR supervised or closed circuit unsupervised devices. Also supports up to sixteen (16) 2-wire smoke detectors.
Zones 2, 3, 4, 6	EOLR supervised or closed circuit unsupervised devices. Also supports 4-wire smoke detectors.
Zone 5	EOLR supervised or closed circuit unsupervised devices. Also supports 4-wire smoke detectors.
Zone 7	EOLR supervised or closed circuit unsupervised devices. Also supports 4-wire smoke detectors. Alternatively, can be used to support remote keyswitch. If used for keyswitch, it cannot be used as protection zone.
Zone 8	EOLR supervised or closed circuit unsupervised devices. Also supports 4-wire smoke detectors. Zone 8 also supports latching glass break detectors.
Zone 9	Unsupervised devices only. Programmable for fast response (10mS). Can monitor fast acting glass break detectors or vibration sensors if set for fast response.

Programmable Response Time For Zone 9:

Zone response time for zone 9 can be set to either 350mS (normal) or 10mS (fast) via program field *14.

Hard-wired Zone 1

UL NOTE: EOLRs are required for UL installations.

Applications	Can be used for EOLR supervised or closed circuit unsupervised devices. It is the only zone that supports up to sixteen (16) 2-wire smoke detectors.
Zone Response Type	Any, except type 23 (no alarm)
Max. Zone Resistance	100 ohms, excluding EOLR
Unsupervised Usage	<ul style="list-style-type: none"> • Cut red PCB jumper. • Only closed circuit devices can be used.
EOLR Supervised	<ul style="list-style-type: none"> • Leave red PCB jumper intact. • Supports both open circuit and closed circuit devices. • Connect open circuit device in parallel across the loop. The 2,000 ohm EOLR must be connected across the loop wires at the last device. • Connect closed circuit device in series with the loop.
EOLR Fire Zone:	<ul style="list-style-type: none"> • Leave red PCB jumper intact. • Assign zone type 09 (fire) • Supports up to sixteen (16) 2-wire smoke detectors. • Second CODE + OFF sequence momentarily interrupts power to reset the smoke detectors. • See table that follows for compatible detectors.

Compatible Smoke Detectors	Device Model # (System Sensor)
Photoelectric	2100
Photoelectric w/ 135° heat	2100T
Photoelectric w/heat sensor, direct wire	2300T
Photoelectric, direct wire	2400
Photoelectric w/heat sensor, direct wire	2400TH
Photoelectric w/B401B base	2451
Photoelectric w/heat sensor & B401B base	2451TH
Ionization	1100
Ionization, direct wire	1400
Ionization w/B401B base	1451
Photoelectric duct detector w/DH400 base	2451
Ionization duct detect. w/DH400 base	1451DH

Zone 1 Advisories

If the EOLR is not at the end of the loop, the zone is not properly supervised. The system may not respond to an open circuit within the zone.

The alarm current provided by this zone is sufficient to support operation of only one detector in the alarmed state.

Hard-wired Zones 2–8

Applications	Can be used for EOLR supervised or closed circuit unsupervised devices. EOLRs are required for UL installations. Can also support 4-wire smoke detectors. Zone 8 can support latching glass break detectors.
Zone Response Type	Any, except types 20–22 (these are used only for 5800 series wireless transmitters).
Max. Zone Resistance	<ul style="list-style-type: none"> • Zones 2–7: 300 ohms, excluding EOLR • Zone 1, 8: 100 ohms, excluding EOLR
Unsupervised Usage	<ul style="list-style-type: none"> • EOLR disabled in field *41 (enter 1). • Only closed circuit devices can be used.
EOLR Supervised	<ul style="list-style-type: none"> • EOLR enabled in field *41 (enter 0). • Supports both open circuit and closed circuit devices. • Connect open circuit devices in parallel across the loop. The 2,000 ohm EOLR must be connected across the loop wires at the last device. • Connect closed circuit devices in series with the loop.
Glass Break Devices on Zone 8	<ul style="list-style-type: none"> • Supports up to 50 2-wire latching type glass break detectors. • Configure as EOLR zone. • Second CODE + OFF sequence momentarily interrupts power to reset the glass break detectors. • See table that follows for compatible detectors.
Smoke Detectors on Zones 2–8	<ul style="list-style-type: none"> • Supports as many 4-wire smoke detectors as can be powered (see UL note on next page). • Assign zone response type 09 (fire). • The zones must be configured for EOLR supervision. • A normally-closed, momentary switch must be installed in series with the power to the detectors in order to allow reset of the smoke detectors after an alarm. • The detectors must be wired in parallel, with the EOLR at the last detector for full supervision. • To supervise power, a System Sensor No. A77-716 EOL Relay Module is recommended.

Compatible Glass Break Detectors	
Use detectors which are compatible with the following ratings:	
Standby Voltage:.....	5VDC--13.8VDC
Standby Resistance:	Greater than 20k ohms (equivalent resistance of all detectors in parallel)
Alarm Resistance:.....	Less than 1.1k ohms (see note below)
Alarm Current:	2 mA --10 mA
Reset Time:.....	Less than 6 seconds
The IEI 735L series detectors have been tested and found to be compatible with these ratings. Up to 50 IEI 735L detectors, connected in parallel, may be used (the alarm current provided by this zone is sufficient to support operation of only one detector in alarmed state). Follow the manufacturer's recommendations on proper installation.	
Detectors which exceed 1.1k ohms in alarm, but maintain a voltage drop in alarm of less than 3.8 volts can also be used.	

Zones 2-8 Advisories

If latching type devices are installed on both zones 1 & 8, and these zones are assigned to different partitions, there is a possibility that, if both devices go into alarm at the same time, the resetting of one device could cause the loss of alarm memory in the other device.

Use of N.O. or N.C. contacts on the same zone may prevent proper glass break detector operation.

UL NOTE: 4-wire smoke detectors cannot be used in UL installations.

Hard-wired Zone 9

Applications	This zone is unsupervised and is suitable for monitoring fast-acting glass break sensors or vibration sensors when programmed for fast response.
Response Type	Any type except fire (09), and types 20–22 (these are used only for 5800 series wireless transmitters).
Response Time	Fast (10 msec) or slow (350 msec) response selected in field *14.
Max. Zone Resistance	300 ohms
Unsupervised Usage	<ul style="list-style-type: none"> • Only closed circuit devices can be used. • Connect these devices in series with one another between terminals 22 & 23.

Zone 9 Advisories

Avoid using mechanical magnetic or relay type contacts in this zone when programmed for fast response.

UL NOTE: The interconnecting wires from zone 9 shall be no longer than 3 feet, with no intervening walls or barriers for UL installations.

2-WIRE POLLING LOOP EXPANSION (Zones 10 through 64)

General Information

The following table summarizes polling loop expansion characteristics.

Applications	<ul style="list-style-type: none"> Built-in 2-wire polling loop interface allows the number of zones to be expanded from the basic 9 zones to up to 64 zones using various Remote Point Modules (RPMs). See ADVISORIES below. The polling loop provides power to sensors and serves as communication path between the panel and sensors. Refer to the list of compatible devices at the end of this section.
RPM Address (ID)	<ul style="list-style-type: none"> Each sensor must be assigned a unique address ID number (from 10-64) before being connected to the polling loop. Care must be taken to assign unique ID numbers to each sensor in order to allow the panel to supervise and provide keypad status indications for individual sensors. Most RPMs have DIP switches to set their addresses. The 4139SN, 4191SN, 4939SN, 4959SN and 998MX have preprogrammed serial numbers which must be "enrolled" by the control via the #93 menu programming mode.
Connections	<ul style="list-style-type: none"> Connect RPM sensors to terminals 24 & 25. Sensors can be connected to a single run, or groups of sensors may be connected to separate wire runs, star configuration, without affecting the panel's ability to supervise individual sensors. Follow the wiring instructions provided with individual sensors. Be sure to observe sensor polarity when wiring. The maximum allowable wire run length between the panel and the last sensor on a given wire run is shown in the table below.

Maximum Polling Loop Wire Runs

Wire Gauge	Max. Length
#22 gauge	650 feet
#20 gauge	950 feet
#18 gauge	1500 feet
#16 gauge	2400 feet

Note: Twisted pair recommended for all normal wire runs.

Important: When in a star configuration, no individual run can be longer than the table indicates, and the total length of all the sensor star runs, combined, cannot exceed 4000'. If using shielded wire, the maximum is 2000'. If longer wire runs are needed, a 4197/4297 Loop Extender Module must be used (see instructions included with the 4197/4297).

Intercom Interference

If an intercom system is being used, the polling loop wires must be as far from the intercom wiring as possible (minimum 6"). If this spacing cannot be achieved, shielded wire must be used. If this is not done, interference on the intercom system might occur. Also note that the maximum total wire length supported is cut in half when shielded wire is used.

NOTE: Shield must be terminated at control terminal 30.

Advisories

The maximum allowable current draw from the polling loop is 64mA. Refer to the POLLING LOOP CURRENT DRAW WORKSHEET (found in the POWERING THE SYSTEM section of this manual) for current draws of various polling loop devices.

Make certain to include the total current drawn on the polling loop in the AUXILIARY CURRENT DRAW WORKSHEET (see POWERING THE SYSTEM section) when figuring the total auxiliary load on the panel's power supply.

Important!
Fault Annunciation

Since the phone module, RF receiver(s), VIM and the polling loop are shared among the 2 partitions, the scheme for annunciating their failure follows:

Respective faults (for zones 87, 88–91, 93 & 97) will report as trouble conditions only, and as such, should be assigned either zone type 00 if no annunciation is desired, or zone type 05 if annunciation as trouble condition is desired. If the polling loop or RF link fails supervision, the corresponding zone number will display a trouble condition for each partition that uses the device that failed. In addition, all zones associated with that device will indicate a check condition. The trouble condition will not interfere with the ability to arm the partition, but the faults must first be bypassed.

Compatible Polling Loop
Devices

4208	Eight Zone Polling Loop Expansion Module Does not support 2-wire smoke detectors. Set DIP switches to identify 8 zones.
4190WH	Two Zone Remote Point Module The left zone can be EOLR supervised, if necessary, and can accept either open or closed circuit sensors, and can be set for fast response. The right zone is unsupervised and can accept closed circuit sensors only.
4278	Quad Element Polling Loop PIR DIP switch programmable and connects directly to the polling loop. Features an auxiliary sensor loop that permits connection of another nearby closed circuit alarm sensor (reed contact, etc.).
4275	Dual Element Polling Loop PIR DIP switch programmable.
4194	Surface Mounted Reed Contact (Wide Gap) DIP switch programmable.
4197/4297	Polling Loop Extender Module By installing a 4297 at the end of the first loop, the polling loop can be continued. If more than 64mA needs to be drawn from the polling loop to power RPMs, use of the 4197/4297 provides another loop with 64mA available. See instructions accompanying unit.
4192SD	Photoelectric Smoke Detector DIP switch programmable.
4192SDT	Photoelectric Smoke Detector w/Heat Detector DIP switch programmable.
4192CP	Ionization Smoke Detector DIP switch programmable.
4139SN	Auto Smart Surface Mount Reed Contact Serial number ID "enrolled" by control panel. Check product availability.
4191SN	Auto Smart Recessed Reed Contact Serial number ID "enrolled" by control panel. Check product availability.
4939SN	Auto Smart Surface Mount Contact Serial number ID "enrolled" by control panel. Check product availability.
4959SN	Auto Smart Overhead Door Contact Serial number ID "enrolled" by control panel. Check product availability.
998MX	Polling Loop PIR Serial number ID "enrolled" by control panel.

WIRELESS EXPANSION (Zones 1–63)

General Information

4281 Series Receivers	5700 Series Transmitters	5881 Series Receivers	5800 Series Transmitters
4281H	63 + 1 RF keypad	5881H	63 + 1 RF keypad
4281M	8	5881M	16
4281L	4	5881L	8

Transmitters Supported By Various Receivers

The following table summarizes wireless expansion characteristics.

Zones Supported	<ul style="list-style-type: none"> The system supports up to 63 wireless transmitters (5700 or 5800 series), plus a wireless keypad (5827/5827BD). To expand the system using wireless, one or two of the same type of RF Receivers can be used. Any zone from 1-63 can be used as a wireless zone. The total number of transmitters supported by each receiver is shown in the table above.
RF Receivers (General)	<ul style="list-style-type: none"> Supports the 4281 and 5881 series RF receivers. The receivers respond to status and alarm signals from wireless transmitters (@345MHz USA; 315MHz Canada 5700 series, 345MHz 5800 series using 5882 receiver) within a nominal range of 200 feet, and relay this information to the control. Two of the same type of receivers can provide either a greater area of coverage, or to provide redundant protection. The type of receiver used is identified in program field 1*32. Important: If using two receivers, one of them must be disconnected while enrolling 5800 series transmitter serial numbers. You will not be able to enroll serial numbers if both are connected during the serial number enrolling procedure. Receivers must be mounted externally to the control a minimum of 10' away from the control and from other receivers. The 4281/5881 receivers connect to the keypad data lines.
Receiver Supervision	<ul style="list-style-type: none"> If the connection is broken between the receiver and the control panel, a TROUBLE will be displayed for zones 89 or 91 (if type 05 is assigned). In addition, all zones associated with the receiver will report a trouble condition. If, within a programmed interval of time, the receiver does not hear from <i>any</i> of its transmitters, a TROUBLE will appear for zones 88 or 90 (if type 05 is assigned).
House Identification	<ul style="list-style-type: none"> 5700 series receivers respond only to transmitters set to the same house ID (01-31). This prevents system interference from transmitters in other nearby systems. 5800 series receivers require house ID only when using a wireless keypad. Use Sniffer Mode (described later) to make sure you do not choose a House ID that is in use in a nearby system. 4281/5881 (for 5827) house ID is programmed via #93 Menu Mode, Device Programming.
Sniffer Mode For House ID (Code + [#] + [2])	<ul style="list-style-type: none"> To check for house IDs being used in nearby systems, enter your "Installer Code" + [#] + [2]. Remove the batteries from transmitters installed in this system to avoid receiving their house IDs. The receiver will now "sniff" out any House IDs in the area and display them. Keeping the receiver in this mode for about 2 hours will give a good indication of the house IDs being used. To exit the Sniffer Mode, simply key your installer code + OFF, then set your house ID to one not displayed in the "Sniffer Mode". Important: Since Sniffer Mode effectively disables RF point reception, Sniffer Mode cannot be entered while any partition is armed.

The following table highlights the features of each receiver.

Feature	4281 series	5881 series
Wiring	Connects to keypad lines	Connects to keypad lines
House ID	Programmed via #93 Menu Mode.	Programmed via #93 Menu Mode (needed only if RF keypad used).
Receiver Address	Set via DIP switches. Enabled via #93 Device Programming.	Set via DIP switches. Enabled via #93 Device Programming.
Cover Removal	Does not cause alarm or trouble.	Does not cause alarm or trouble.
Go/No Go Mode	Automatic upon entering test mode (code + [5]).	Automatic upon entering test mode (code + [5]).
Spatial Diversity (2 antennas)	Yes. Eliminates nulls and voids. 2nd receiver expands coverage area or provides additional redundancy.	Yes. Eliminates nulls and voids. 2nd receiver expands coverage area or provides additional redundancy.
Transmitter ID	Set via DIP switches.	Serial numbers are "enrolled" by the system or downloaded.

4281 Series Receiver

- Set field 1*32 to 1.
- Using #93 Menu mode–Device Programming, select as RF device type (type 3).
- Set house ID via #93 Menu Mode.
- Set receiver's device address (01-07 only) using its DIP switches. Lower numbered address is primary receiver (supervisory fault ID 90, 91). Higher numbered address is secondary receiver (receiver fault ID 88, 89).
- **Important:** 4281 microprocessor must have part number N5334Vx, where x is any number. The microprocessor is located just above the DIP switch on the PC board.

5881 Series Receiver

- Set field 1*32 to "2".
- Using #93 Menu Mode–Device Programming, select as RF device type (type 3).
- Set house ID via #93 Menu Mode (needed for 5827 keypad only).
- Set receiver's device address (01-07 only) using its DIP switches. Lower numbered address is primary receiver (supervisory fault ID 90, 91). Higher numbered address is secondary receiver (receiver fault ID 88, 89).

Transmitters

The following table summarizes wireless transmitter characteristics.

NOTE: After replacing a low or dead battery, activate the transmitter and enter the security code + OFF to clear its memory of the "Low Battery" signal.

<p>Transmitters (General)</p>	<ul style="list-style-type: none"> • Supports 5700 or 5800 series transmitters. • Each transmitter has a unique transmitter ID number (Zone #). 5700 series transmitters use DIP switches to set the ID. 5800 series transmitters must have their ID numbers "enrolled" by the system or downloaded. • 5700 series transmitters and the 5827 keypad must also be set for a house ID. Other 5800 series transmitters have built-in serial numbers and do not require a house ID to be set. After installation, check that all transmitters have been assigned the proper house ID by using the procedure described later.
<p>Trans. Supervision</p>	<ul style="list-style-type: none"> • Each transmitter (except 5701, 5727, 5801, 5802, 5802CP, & 5804) is supervised by a check-in signal that is sent to the receiver at 70-90 minute intervals. If at least one Check-in is not received from a transmitter within a programmed interval (field 1*31), the keypad will display the transmitter number and "CHECK" will be displayed. • Each transmitter (including 5701; 5727, 5801, 5802, & 5802CP) is also supervised for low battery conditions, and transmits a low battery signal when the battery has approximately 30 days of life remaining. The keypad displays the transmitter number and "LO BAT".
<p>5800 Series "Enroll"</p>	<ul style="list-style-type: none"> • 5800 series transmitters have built-in serial numbers that must be "enrolled" by the system during on-site programming. Refer to PART 2. PROGRAMMING PROCEDURES section for details.
<p>Checking Trans. Operation including DIP & serial number (Code + [#] + [3])</p>	<ul style="list-style-type: none"> • To check that all transmitters have been set properly, program the receiver to the proper house ID, if required, and enter the Installer code + [#] + [3]. • All transmitters that have been enabled for the partition in which the test was initiated will be displayed. As each transmitter checks in (up to 2 hours), its ID number will disappear. A faster way to do this is to fault each transmitter, which causes a transmission to be sent to the receiver. When all transmitters have checked in, there should be no ID numbers displayed. • Repeat check for each partition using RF transmitters.
<p>"Go/No Go" Test Mode (Patented)</p>	<ul style="list-style-type: none"> • This mode helps determine the best location for each transmitter and is activated by putting the control panel in the TEST mode. • The receiver's sensitivity is reduced by half. Once transmitters are placed in their desired locations and the approximate length of wire to be run to sensors is connected to the transmitter's screw terminals, fault each transmitter. <i>Do not conduct this test with your hand wrapped around the transmitter.</i> • If a single receiver is used, the keypad will beep three times to indicate signal reception. If two receivers are used, the keypad will beep once if the first receiver received the signal, twice if the second receiver received the signal and three times if both receivers heard the signal (which is desirable for redundant configurations). • If the keypad does not beep, reorient or move the transmitter to another location. Usually a few inches in either direction is all that is required. • To exit this mode, enter the installer code and press OFF. Note that the Receiver's sensitivity is fully restored when this mode is exited.

Arming/Disarming
With RF Keys
(5801, 5802, etc.)

5800 series RF keys can be used to arm and disarm the system. These transmitters include the 5801, 5802, 5804 and any other 5800 series transmitter (except 5827 wireless keypad) if programmed for one of zone type responses 20-22. These transmitters are tied to a user in order to provide a record of who armed or disarmed the system. Because of this, an RF button will not arm or disarm a system unless it has been assigned to a user, which is done during the "add a user" function (see "Add A User Code" section). In addition, when the user is deleted from the system, the key is de-activated. To test whether the keys are assigned to zones or not, use the test mode. When the appropriate button is pressed, the corresponding zone will be displayed on the keypad and will remain there until test mode is terminated.

If Using a 5827BD/5800TM
Wireless Keypad and
Transmitter Module

The 5827BD wireless keypad is a 2-way keypad that receives system status via the 5800TM transmitter module. The 5800TM module is an addressable device that connects to the controls keypad terminals. To set the 5800TM's address, one of its jumpers must be cut as follows:

- If keypad is used in partition 1 (field 1*48 = 1), cut the red (W1) jumper.
- If keypad is used in partition 2 (field 1*48 = 2), cut the white (W2) jumper.

NOTE: The 5800TM transmitter module does not need to be programmed via #93 Menu Mode—Device Programming.

Wireless Zone Types

Each RF zone, 5700 series or 5800 series, can be programmed to respond as burglary or fire zone types such as ENTRY/EXIT, INTERIOR, PERIMETER, etc. (see the *ZONE TYPES DEFINITIONS* section in the separate PROGRAMMING GUIDE for a complete explanation of each zone type). 5700 series devices should be assigned response types as follows:

5700 Series Transmitter Zone Types

ZONE TYPE	TRANSMITTER ID # (zone number)
Entry/Exit Burg	1 through 47 *
Perimeter Burg	1 through 47 *
Interior Burg	1 through 47 * 32 through 47 * (5775)
Fire	48 through 63 * 48 through 55 ** (5706)
24 Hour Panic (silent or audible)	48 through 63* 62 or 63 *** (5701)
Day/Night Burglary	1 through 47 *
24 Hour Auxiliary	1 through 47 *

NOTES:

- * Note that zones 1–63 can be used, but have the following limitations: Transmitters set for zones 48–55 will transmit once every 12 seconds while the zone is faulted. Transmitters set for zones 56–63 will transmit once every 3 seconds while faulted. These two ranges of zone numbers could adversely affect transmitter battery life. Transmitters set for an ID of 32 through 47 will have a 3 minute lock-out between transmissions. Use this last range of zone ID numbers for sensors protecting frequently used doors or windows to conserve battery life.
- ** Transmitter IDs 48 through 55 have highest signal priority.
- *** Transmitter IDs 62 and 63 are unsupervised to allow removal of the 5701 off premises —signal priority is lower than that of fire, but higher than burglary.

Advisories

1. Do not place transmitters on or near metal objects. This will decrease range and/or block transmissions.
2. Place the receiver in a high, centrally located area for best reception. Do not place receiver on or near metal objects.
3. For maximum range, the RF receiver must be at least 10 feet from the Control panel or any remote keypads to avoid interference from their microprocessor.
4. If dual receivers are used:
 - A. Both must be at least 10 feet from each other, as well as from the Control panel and remote keypads.
 - B. Device addresses must be different.
 - C. Using two Receivers *does not* increase the number of transmitters the system can support (63 transmitters, plus a wireless keypad), but will increase remote transmission range.

Fault Annunciation Since the phone module, RF receiver(s), VIM and the polling loop are shared among the 2 partitions, the scheme for annunciating their failure follows:
Respective faults (for zones 87, 88–91, 93 & 97) will report as trouble conditions only, and as such, should be assigned either zone type 00 if no annunciation is desired, or zone type 05 if annunciation as trouble condition is desired. If the polling loop or RF link fails, the corresponding zone number will display a trouble condition for each partition that uses the device that failed. In addition, all zones associated with that device will indicate a check condition. The trouble condition will not interfere with the ability to arm the partition, but the faults must first be bypassed.

NOTE: 5800 series transmitters have built-in tamper protection and will announce a "CHECK" condition if cover is removed unless field *24 is disabled.

Important Battery Notice The wireless transmitters are designed to provide long battery life under normal operating conditions. Longevity of batteries may be as much as 4–7 years depending on the environment, usage, and the specific wireless device being used. External factors such as humidity, high or low temperatures, as well as large swings in temperature may all reduce the actual battery life in a given installation. The wireless system can identify a true low battery situation, thus allowing the dealer or user of the system time to arrange a change of battery and maintain protection for that given point within the system.

Button type transmitters should be periodically tested by the user for battery life (ex. 5701, 5801, 5802, 5802MN, 5802CP, 5804).

**Compatible 5700 Series
Wireless Devices**

5701	Panic Transmitter Programmable for either silent or audible 24-hour alarm (can be DIP switch programmed for zones 62 or 63).
5711	Slimline Door/Window Transmitter Can be used with any closed circuit sensor. Can be used on any zone 1–63 but, if set for zones 32-47, there will be a 3-minute lock-out between transmissions.
5711WM	Door/Window Transmitter w/Reed Switch Can be used with any closed circuit sensor, on any zone 1–63 but, if set for zones 32–47, there will be a 3-minute lock-out between transmissions.
5715WH	Universal Transmitter DIP switch selectable for fast response, open or closed circuit sensor usage, and has a tamper protected cover. Use in applications where open circuit heat detectors are needed or where fast response devices are needed. Can be used on any zone 1-63 but, if set for zones 32–47, there will be a 3-minute lock-out between transmissions.
5727	Wireless Keypad The keypad is identified as zone "00" when it transmits low battery messages. The keypad panics are identified in the same way as wired keypad panics (i.e. 95, 96 & 99).
5716	Door/Window Transmitter Can be used with any open or closed circuit sensor (DIP switch selectable), and features a built-in reed switch. Can be used on any zone 1-63 but, if set for zones 32-47, there will be a 3 minute lock-out between transmissions.
5775	Wireless PIR DIP switch programmable for zones 32–47. NOTE: There is a 3-minute lock-out between transmissions to preserve battery life.
5706	Wireless Photoelectric Smoke Detector (System Sensor) DIP switch programmable for zones 48–55.
5707	Wireless Photoelectric Smoke Detector (ESL) DIP switch programmable for zones 48–55.

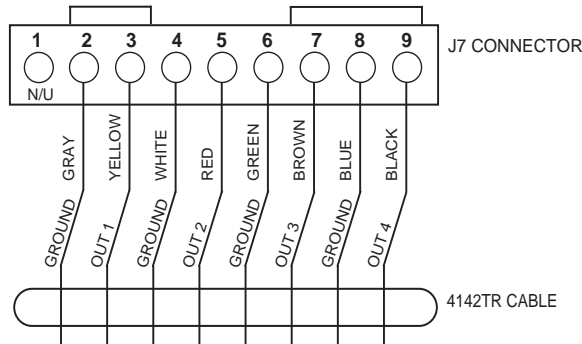
Compatible 5800 Series Wireless Devices (Refer to the installation instructions provided with each transmitter)	5801.....	4-Button Transmitter
	5802.....	Pendant Panic Transmitter
	5802CP.....	Belt Clip Panic Transmitter
	5802MN.....	Belt Clip or Pendant Panic Transmitter
	5804.....	4-Button transmitter
	5806.....	Photoelectric Smoke Detector
	5807.....	Photoelectric Smoke Detector
	5808.....	Photoelectric Smoke Detector
	5816.....	Miniature Transmitter
	5816MN.....	Miniature Transmitter
	5816TEMP.....	Low Temperature Transmitter
	5817.....	3-Point Transmitter
	5818.....	Recessed Transmitter
	5827.....	Wireless Keypad
	5849.....	Glass Break Detector
5890.....	Dual Element PIR	

VOLTAGE TRIGGERS (Connector J7)

(Ground Start Module, Keyswitch, Remote Keypad Sounder, or a non-Ademco AAV Unit requiring a Voltage trigger)

General Information Connector J7, located on the right hand side of the main PCB provides 4 latching trigger outputs for operating the 675 Ground Start Module, the 4146 Keyswitch,, a non-Ademco AAV unit, a remote keypad sounding piezo, and for triggering auxiliary alarm signaling equipment (such as the 7720 and 7920SE LORRA Subscriber Radios). Note that these output triggers can be enabled by partition via programming field 2*20.

The pin assignments of this connector are shown below. Use only the 4142TR 9-wire cable (available as an option) for making connections to this connector.



J7 CONNECTOR FOR VOLTAGE TRIGGERS

OUT 1: GROUND START OR OPEN/CLOSE
 OUT 2: FIRE OR KEYSWITCH ARMED LED
 OUT 3: BURGLARY/AUDIBLE PANIC/AUXILIARY
 OUT 4: SILENT PANIC/DURESS OR KEYSWITCH READY LED

Output 1: Operates, by default, as a trigger for the 675 ground start module. This output may optionally be programmed via field 1*46 to operate as an open/close trigger, a remote keypad sounder output , or a trigger for an AAV unit from another manufacturer, as follows:

- 1*46 0 = ground start module
- 1 = open/close trigger
- 2 = remote keypad sounding
- 3 = AAV trigger (non-Ademco AAV unit only!)

Only one of these options may be used at any time.

Rating: When Activated: 10–13.8 VDC through 4K ohms (2.5mA max).

When De-activated: 100 ohms to ground.

(Continued on next page)

Outputs 2 & 4: Operate, by default, as Fire and Silent Panic/Duress triggers respectively. These triggers may optionally be programmed to act as Arm and Ready status indicators when it is desired to use the 4146 keyswitch.

Output 2, 3, & 4 Rating: When Activated: 10–13.8 VDC through 5K ohms (2mA max).
When De-activated: 1k ohms to ground.

Ground Start Module

Not intended for use in UL Listed applications.

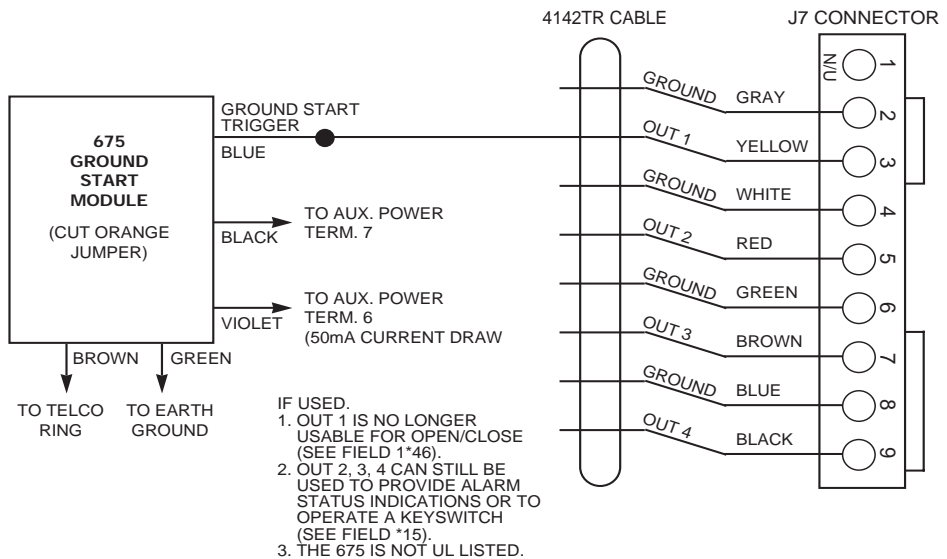
An optional 675 Ground Start module can be used for installations having telephone lines which require ground start instead of loop start operation to obtain dial tone from the telco central office.

If used, program field 1*46 must be set to "0" (factory default) and the 675 Ground Start Module must be connected to the panel's J7 connector trigger output 1, to auxiliary power, and to the "RING" side of the telephone line as shown in the diagram that follows.

Use the following procedure to determine which side of the telephone line is the "RING" side:

- a. Connect the "+" lead of a DC voltmeter to earth ground, and the "-" lead to one side of the telephone line.
- b. The wire which reads +50VDC is the "RING" side.

When the panel has a message to transmit to the central station, it will seize the line, go off hook, and then trigger the 675 module to connect the "RING" side of the telephone line to earth ground. The panel will cause the module to break the connection between "RING" and earth ground when a dial tone is obtained.



GROUND START MODULE CONNECTIONS

Remote Keyswitch

If the keyswitch option is selected (field *15), the alarm trigger outputs 2–4 are disabled.

An optional Remote Keyswitch can be used for remote arming and disarming of the system. **Note that keyswitch arming may only be used in one partition.**

If used, program field *15 must be set to the desired partition to enable the keyswitch option, and the 4146 keyswitch's normally open momentary switch and LEDs must be connected to Zone 7 and to the J7 connector trigger outputs respectively. **A 2k EOL resistor must be connected across the switch regardless of whether or not zones 2–8 are selected to use EOL resistors.** See keyswitch wiring diagram on the next page.

Note that the system automatically assigns zone type 10 to zone 7 if a keyswitch is used.

A momentary short across this zone will arm the system in the "AWAY" mode. If the short is held for more than 3 seconds, the system will arm in the "STAY" mode. After the system has been armed, the next time zone 7 is shorted, the system will disarm.

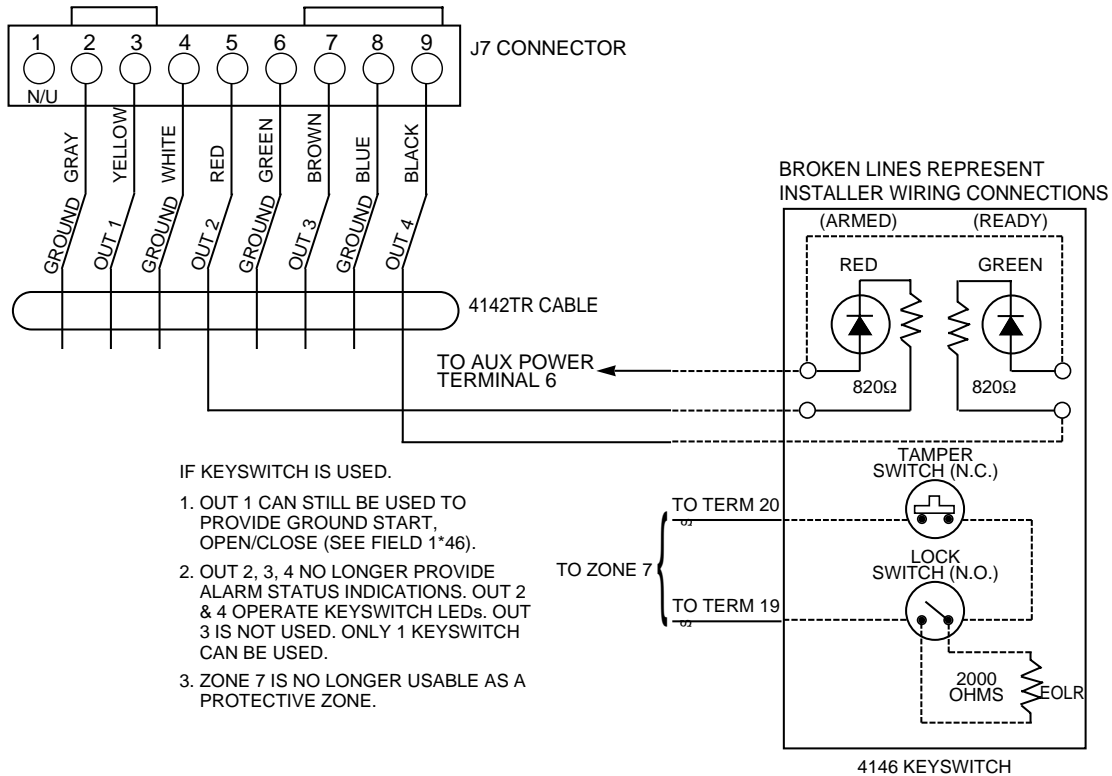
An optional closed-circuit tamper switch (model 112) can be wired in series with zone 7, so that, if the switchplate is removed from the wall, the tamper will open, disabling keyswitch operation until the system is next disarmed from the keypad.

Notes:

- Only one keyswitch with LEDs can be supported by the system's power supply.
- Open/close reporting for keyswitch is enabled in field *40, and the keyswitch reports as user "0".
- If the keyswitch is used, trigger output 1 can still be used as previously described in VOLTAGE TRIGGERS section. Trigger outputs 2 & 4 are used to light the keyswitch LEDs as shown below.
- If the keyswitch is used, zone 7 cannot be used as a protection zone.

LED indications are defined as follows:

Green	Red	Meaning
Off	Off	Disarmed & Not Ready
On	Off	Disarmed & Ready
Off	On Steady	Armed Away
Off	Slow Flash	Armed Stay
Off	Rapid Flash	Alarm Memory



- IF KEYSWITCH IS USED.
1. OUT 1 CAN STILL BE USED TO PROVIDE GROUND START, OPEN/CLOSE (SEE FIELD 1*46).
 2. OUT 2, 3, 4 NO LONGER PROVIDE ALARM STATUS INDICATIONS. OUT 2 & 4 OPERATE KEYSWITCH LEDs. OUT 3 IS NOT USED. ONLY 1 KEYSWITCH CAN BE USED.
 3. ZONE 7 IS NO LONGER USABLE AS A PROTECTIVE ZONE.

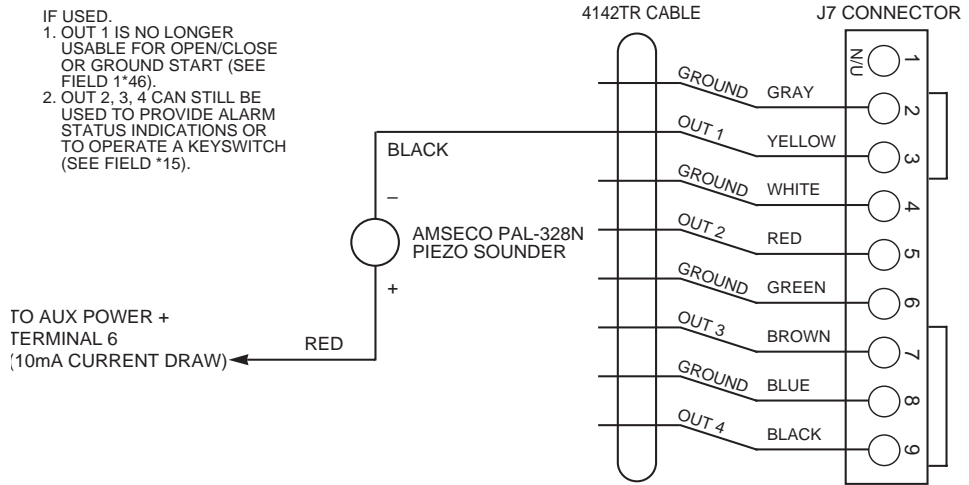
REMOTE KEYSWITCH WIRING

Remote Keypad Sounder
Operation & Wiring

An optional Amseco PAL 328N can be used for installations where it is desired to remote the sounds produced by the keypad's built-in piezo sounder for one partition. The panel will remote all sounds (i.e. alarm, trouble, chime, entry/exit, etc.) produced by the keypad's built-in sounder except for the short clicks associated with keypad key depression. One application of this feature might be to produce chime sounds in a location which is distant from the panel's keypads. This can also be accomplished using relay outputs (see Output Relay section).

If used, program field 1*46 must be set to "2" to enable the remote keypad sounder option, and the Amseco piezo must be connected between the panel's auxiliary power and the J7 connector trigger output as shown below.

In addition, field *15 must be used to select the partition whose keypad sounds are to trigger the sounder. Zone 7 **must** be assigned to be a keyswitch zone (even if keyswitch is not used).

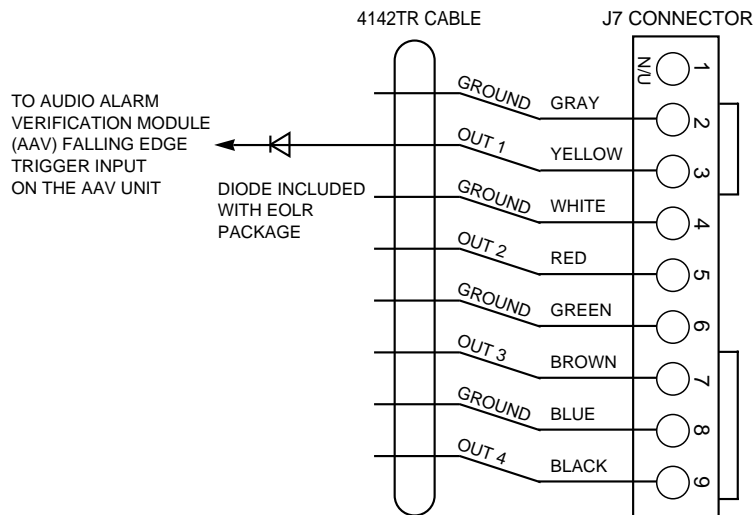


REMOTE KEYPAD SOUNDING CONNECTIONS

Using A Trigger To Activate Another Manufacturer's AAV Unit (if necessary)

If using an Audio Alarm Verification module from another manufacturer, and a voltage trigger will be used to activate the module, make connections as shown below. In addition, set program field 1*46 to option 3, and program zone 5 for response type 10; also, program field 1*60 for "1".

Note: If field 1*60 is set for "1", zone 5 cannot be used as a protection zone, and the **EOLR must be removed**. Refer to the *2-WAY VOICE KEYPADS & AUDIO ALARM VERIFICATION* section later in this manual for additional information.



USING A TRIGGER TO ACTIVATE A NON-ADEMCO AAV UNIT

Section 6. RELAY OUTPUTS & POWERLINE CARRIER DEVICES

General Information The VISTA-40 supports up to 8 relay outputs. These outputs may consist of relay outputs from the 4204 output relay module (4 relay outputs per module) or X-10 device outputs. Outputs can be activated and deactivated by predetermined events such as turning on lights in the event of an alarm condition and/or closing a fire door in the event of a fire alarm condition. Refer to “Relay Programming” in Section 4 of PART 2. PROGRAMMING PROCEDURES for instructions on programming relay options.

There are many different uses for relays, some of which are shown at the end of this section.

4204 Relay Module The 4204 Relay Module has 4 form C (normally open and normally closed contacts) relays. Each relay can be used independently for different functions. The 4204 is wired to the control's keypad terminals 6-9. Use standard 4-conductor twisted cable (for long wire runs) or the connector supplied with the 4204. Each 4204 should be home run back to the panel. The maximum wire run length from the panel to the 4204 must not exceed:

Wire Gauge	Maximum Length
#22	125 feet
#20	200 feet
#18	300 feet
#16	500 feet

The 4204's DIP switch must be set for a device address and that address must be enabled in the control's Device Programming mode.

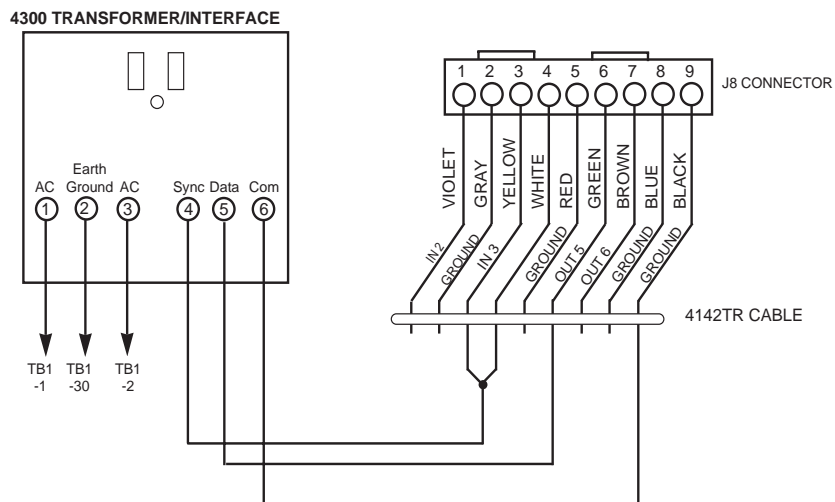
Program the output relays using the control's *93 Menu Mode. Refer to “Relay Programming” in Section 4 of PART 2. PROGRAMMING PROCEDURES for details.

4300 Transformer & X-10 Devices When using X-10 devices, the 4300 transformer must be used **instead of** the 1361 transformer shown on the Summary of Connections diagram. The 4300 provides AC power to the panel and relays signals from the panel through the premises AC wiring to X-10 devices.

Run a 6-conductor cable between the 4300 interface and the panel. Splice this cable to a 4142TR cable as shown in the diagram below. Note that the white and yellow wires of the 4142TR **must be spliced** together.

X-10 devices plug into standard AC outlets and can be used to perform various functions. Be sure to set the proper house and unit IDs when using X-10 devices.

UL NOTE: X-10 devices and the 4300 are not UL Listed for fire or burglary functions and are intended only for home automation.



4300 TRANSFORMER CONNECTIONS

Section 7. THE 4285 PHONE MODULE

General Information

The 4285 Phone Module is an add-on accessory for the VISTA-40 that will permit access to the security system via a Touch-tone phone (either on premises or by a call-in when away). **Only one Phone Module can be used in this security system and it must be assigned as device address 04 only and assigned to partition 1 using #93 Menu Mode, Device Programming. The Phone Module normally controls the partition in which it is installed, but can control the other partition by using the "GOTO" command.**

UL

The 4285 is not permissible in UL installations.

When properly connected, the 4285 Phone Module will enable the user to do the following via a Touch-tone telephone:

1. Receive synthesized voice messages over the phone regarding the status of the security system.
2. Arm and disarm the security system and perform most other commands using the telephone keypad, with voice annunciation being provided over the phone as confirmation after any command is entered.

The on-premises phone system need not have Touch-tone service, but the phone used for phone access must have Touch-tone capability (if premises uses PULSE dialing, switchable phones should be set for Touch-tone temporarily before attempting phone access). An off-premises phone that does not have Touch-tone service and must use Pulse for dialing may not permit switching to Touch-tone *after* dialing; in such a case, phone access from that phone will not be possible.

NOTE: Some digital phone systems may not emit true TouchTone from the keys, so access may be limited by this type of phone.

The Phone Module can annunciate many of the same words that would normally be displayed on an Alpha keypad under the same system conditions.

Phone access to the security system from on-premises is possible only by entry of an installer-programmed 2-digit "phone code" (1–9 and * or #). When attempting to access the security system from a phone outside the premises, a voice prompt to enter the 2-digit phone code *and* the 4-digit security code will be provided.

Detailed operating instructions for phone access to the security system are provided with the Phone Module. In addition, a **PHONE ACCESS USER'S GUIDE** is supplied with the Phone Module for the user of the system.

Mounting The Phone Module

The Phone Module may be mounted in the control cabinet if space is available or, if this is not possible, on the side of the cabinet or adjacent to it. Pry off the Phone Module's cover prior to wiring.

When the Phone Module is mounted inside the control cabinet, it can be attached with 2-faced adhesive tape to the cabinet's interior surface. *Do not mount on the cabinet door or attempt to attach it to the PC board.* The Module's cover can be left off if it is mounted within the cabinet.

When the Module is to be mounted outside the cabinet, screw holes at its rear will permit it to be mounted horizontally or vertically (2-faced adhesive tape may be used, if preferred). Wires can be brought out from the side or back (a round breakout is also available on the back). When the Module's mounting and wiring is completed, its cover should be installed (with label affixed, as indicated next).

Affix the 4285 connections label (supplied separately) to the inside of the Phone Module's cover if the cover is used. Otherwise, affix the label to the inside of the *control cabinet's* door.

Wiring Connections

General The 4285 is wired between the control panel and the premises handset(s). It listens for touch tones on the phone line and reports them to the control panel. During on-premises phone access, it powers the premises phones; during off-premises phone access, it seizes the line from the premises phones and any answering machines.

Wiring 1. Make 12V (+) and (-) and data in and data out connections from the Phone Module to the control*, using the connector cable supplied with the Phone Module as follows:

Color	Lead	Terminal On Control
--------------	-------------	----------------------------

GREEN	to	DATA IN (terminal 8)*
BLACK	to	AUX - (terminal 7)*
RED	to	AUX + (terminal 6)*
YELLOW	to	DATA OUT (terminal 9)*

* These are the same connections as for remote keypads.

2. Insert the keyed connector at the other end into the mating header on the Phone Module. See the 4285 Phone Module Wiring Connections diagram on the next page
3. Connect terminals 1 through 5 on the Phone Module as shown in the diagram and in the table below.

Note: Use an RJ31X jack with a direct-connect cord and make all connections exactly as shown. If the leads on the direct-connect cord are too short to reach their assigned terminals, splice additional wires to them, as required.

TABLE 1

4285 Terminal	Connects to:
1. Phone In (Tip)	Terminal (26) on control.
2. Phone In (Ring)	Terminal (27) on control.
3. Phone Out (Tip)	BROWN lead from direct-connect cord.
4. Phone Out (Ring)	GRAY lead from direct-connect cord.
5. Ground	Earth ground terminal (30) on control.
6. Audio Out 1	Future use
7. Audio Out 1	Future use

ADVISORY

If no touch tones are produced following access to the security system via the 2-digit phone code **from on-premises** (this problem may arise in rare cases), it may be necessary to reverse the wires connected to terminals 3 and 4 on the Phone Module **and** the wires connected to terminals (26) & (27) on the control. The wiring diagram shows the wiring connections that will provide proper operation in most cases.

IMPORTANT: The phone module must be properly grounded to the panel in order to operate. Attach a wire (22-18 gauge) from terminal 5 on the phone module to terminal 30 on the VISTA-40 control.

CALLER ID NOTE: Some caller ID units may not be compatible with the 4285. Refer to 4285 wiring diagram on next page for proper connections.

Programming The Control For Phone Access

The following programming fields must be programmed when using a phone module:

Using #93 Menu Mode-Device Programming, program the phone module (preset at address 4) for phone module device type 05 and assign it to partition 1.

* **20** Phone Module Phone Code

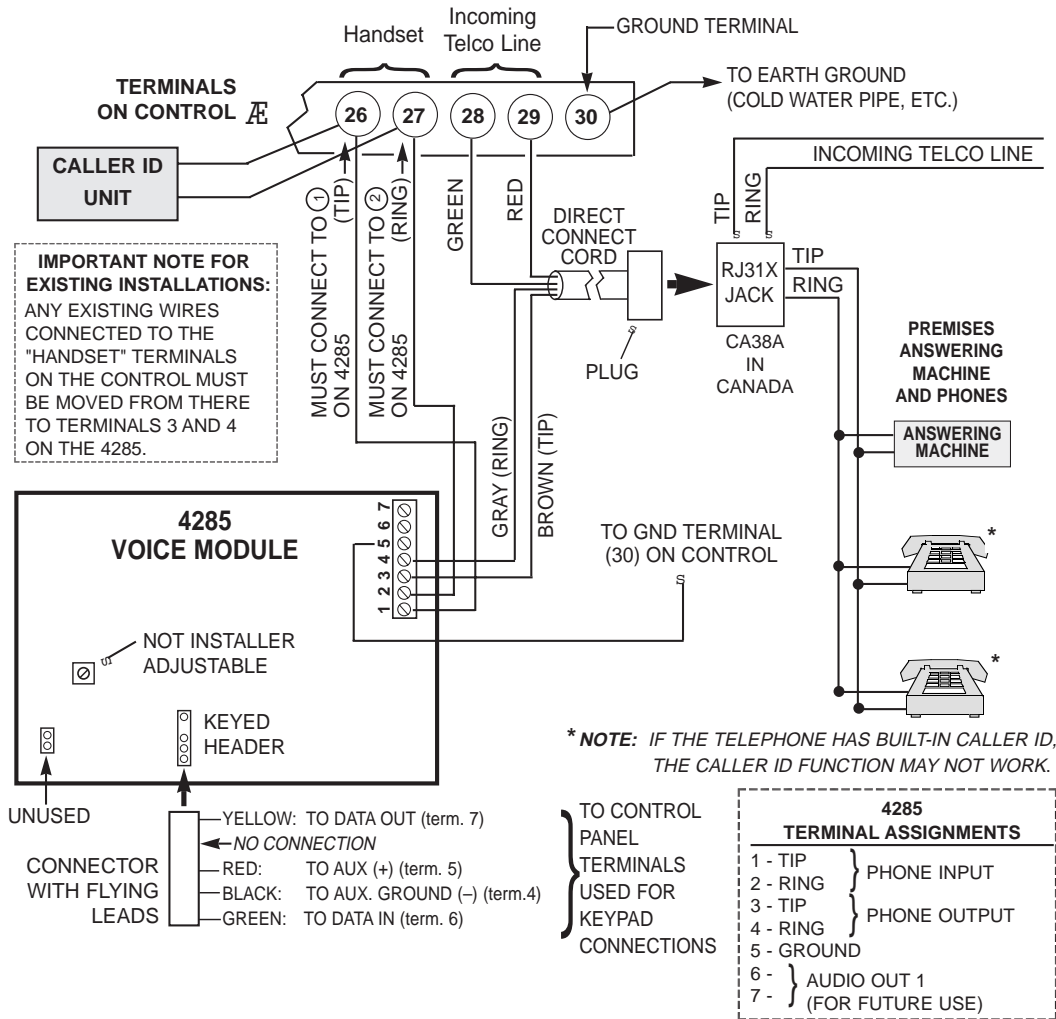
* **44** Ring Detection Count cannot be set to 0

* **74**/* **75**/* **78** Alarm Report code for phone module faults (zone 87-99)

1*09 Zone Response Type for phone module (zones 87-93, type 05)

Zone descriptors must also be programmed, regardless of the type of keypads in use. If this is not done, the Phone Module will be unable to announce a description of the zone(s) in alarm, trouble, etc. (the Phone Module will announce zone numbers only). In addition, relay voice descriptors can be programmed if output relays are being used.

- WIRING NOTES:**
1. Wire the 4285 Phone Module exactly as shown, using a direct-connect cord and RJ31X jack.
 2. If Touch-tones are not present following phone access to the security system via an on-premises phone, try reversing the pair of wires connected to terminals 3 & 4 on the 4285, and the pair of wires connected to terminals 26 & 27 on the control.
 3. Connection to the incoming Telco line via an RJ31X jack and direct-connect cord, as shown in this diagram, is essential, even if the system is not connected to a central station. **The 4285 will not function if this is not done.**
 4. Phone module ground terminals must terminate to ground on the control.
 5. There must be 7 volts or greater while phone is "off-hook" for phone module to operate.



4285 PHONE MODULE WIRING CONNECTIONS

Installations Where The Telephone System Includes An Answering Machine

When accessing the system via a phone, the programmed 2-digit phone code should be entered during the first 20 seconds of the OUTGOING message on the answering machine (preferably during a pause in the outgoing message), before it begins recording an incoming message.

The reason for entry of the phone code during a pause is that touch tones (produced by entry of the 2-digit phone code) might not be received by the security system while an answering machine's outgoing voice message is on the phone line. Also, entering the 2-digit phone code *before* the answering machine starts recording will prevent the phone code tones from being recorded.

If there is difficulty obtaining phone access when trying to use this procedure, instruct the end user to re-record the outgoing message on the answering machine, but leave a 2-second pause at its beginning.

Example:

(2-SECOND PAUSE) THIS IS 555-1212. I CAN'T COME TO THE PHONE JUST NOW. PLEASE LEAVE A MESSAGE AFTER THE TONE.

Section 8. 2-WAY VOICE KEYPADS & AUDIO ALARM VERIFICATION (AAV)

General Information

IMPORTANT: Audio alarm verification reports only on the primary phone number.

The VISTA-40 features 2-way voice capability when used with the Ademco Voice Interface Module (VIM) and 6139AV 2-way voice keypads.

UL The AAV option cannot be used in UL installations

An Audio Alarm Verification (AAV) module, such as the Ademco VIM module, permits voice dialog between an operator at a central station and a person at the alarm installation, for alarm verification. This feature is supported only if alarm reports are programmed to be sent to the primary phone number. Setting field 1*60 to "0" selects the VIM module.

After all messages have been sent during a reporting session to the primary phone number, the control will trigger the AAV if at least one of the messages was an alarm report. If the central station has a 685 receiver Rev 4.6 or higher, the panel can be either programmed for auto callback or "listen in to follow". If the receiver is not a 685 or if the Rev number is lower than 4.6, the AUTO CALLBACK feature must be enabled in order for the 2-way voice module to function.

Once triggering occurs, the control will give-up the phone line to the AAV module, without breaking connection with the central station. During the time the module is active, all sirens and all continuous keypad sounds in all partitions will be shut off. When the module indicates that the audio alarm verification session is completed, all keypad sounds will be restored. Sirens will be restored if the alarm timeout period has not expired.

As part of its fail-safe software, the control will limit all audio alarm verification sessions to 5, 10, or 15 minutes, selectable by programming via #93 (this is because once the session begins, the AAV module controls the duration). If a new fire/panic alarm should occur during a session, the control will break phone connection and send the new fire/panic alarm report, then re-trigger AAV mode. All other dialer messages triggered during on-going conversation will be held until either the AAV module signals that it is inactive, or the AAV timeout occurs.

Using the VIM Module and 6139AV Keypad

To provide 2-way voice capability, the system requires a VIM (Voice Interface Module) and at least one 6139AV 2-way voice keypad in each partition being monitored. The system supports up to six 6139AV keypads. The 685 Receiver at the central station requires software version 4.6 or higher, unless the AUTO CALLBACK feature is enabled.

Setting The DIP Switches on the VIM Module

Set the VIM's DIP switches to the desired device address (01-15) referring to the VIM wiring diagram on the next page. Address 04 is reserved for the 4285 phone module. NOTE: The VIM reports as zone 93 for supervision faults.

VIM Module Connections To the Control

The VIM connects to the control's keypad terminals in the same manner as any other keypad. The connection must be home run to the control. The VIM also connects to the control's "handset" terminals. See the VIM connection diagram on the next page.

1. Connect the VIM module to the control's keypad terminals using the connector with Red, Black, Green, and Yellow wires (supplied with the keypad).
 - a. Attach the 4-pin keypad connector with 4 flying leads to the 4-pin header on the right side of the VIM module (see the VIM connection diagram on the next page for location of the 4-pin header).
 - b. Connect the flying leads from this connector to the keypad terminals on the control, as follows:
 - Red wire to terminal 6.
 - Black to terminal 7
 - Green to terminal 8
 - Yellow to terminal 9.

2. Connect 3 wires from terminals 1, 2, and 3 on the right side of the VIM module to the control, as follows:
 - a. Terminal 1 to the ground terminal (30) on the control.
 - b. Terminals 2 and 3 to the "handset" terminals (26 & 27) on the control.

6139AV Audio Connections To The VIM Module

Each 6139AV 2-way Keypad requires a shielded 2-wire connection to the VIM Module. Splice the flying leads of the supplied SA550AB Audio Bus connector to this shielded cable, then plug the connector into the 6139AV keypad's J5 connector located on the right of the keypad, just beneath the PC board.

Connect the 6139AV keypad(s) to the VIM module as follows:

- Keypad 1 (and Keypad 4, if used): to terminals 1, 2, and 3
- Keypad 2 (and Keypad 5, if used): to terminals 4, 5, and 6
- Keypad 3 (and Keypad 6, if used): to terminals 7, 8, and 9.

IMPORTANT: Connect the shield at the VIM module, **but not at the keypad**, as shown in the VIM connection diagram.

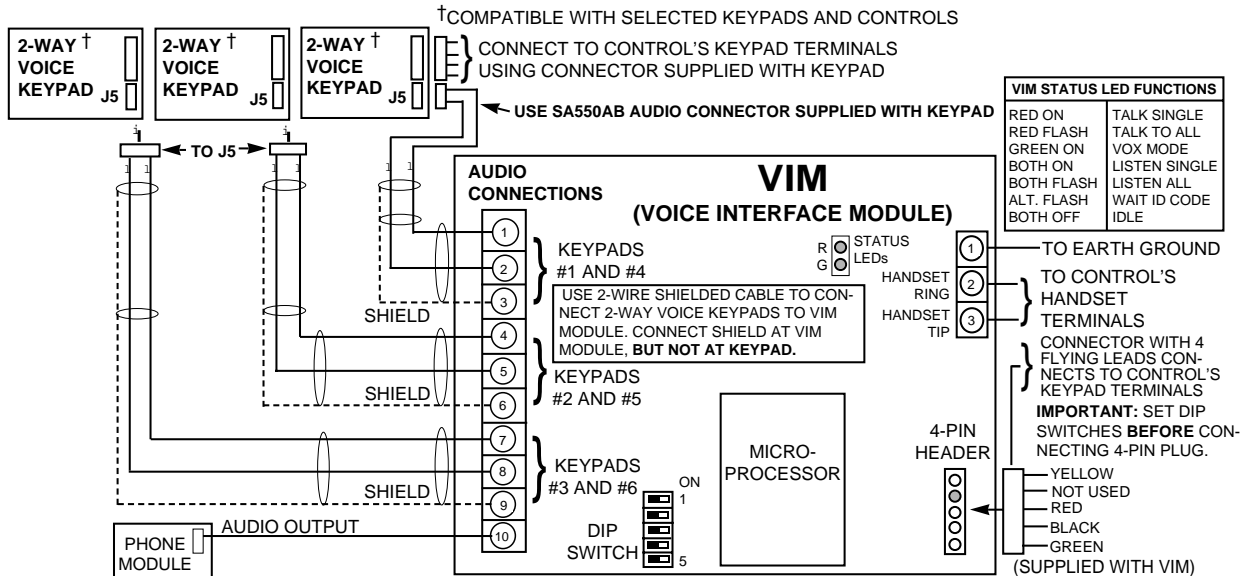
If more than three 6139AV keypads are used (up to six 6139AV keypads can be supported), connect as follows: keypad 4 in parallel with keypad 1, keypad 5 in parallel with keypad 2, and keypad 6 in parallel with keypad 3.

Terminal 10 can, if you wish, be connected to the audio output on the 4285 module (terminal 6 or 7), if the phone module is used in the system. This will allow the voice output heard through a telephone via the phone module to be heard through the built-in speaker in the 6139AV keypad(s).

Programming Information For the VIM Module

When programming the system, use #93 Menu Mode–Device Programming to program the following:

- Device address as set by the DIP switches (01–15).
- Device type "7".
- Partition 1, partition 2, automatic or all.
- Voice session timeout duration (5 min, 10 min, 15 min, or no timeout).



IMPORTANT: SET DIP SWITCHES BEFORE CONNECTING 4-PIN CONNECTOR FROM CONTROL'S KEYPAD TERMINALS

* ADDRESS 4 RESERVED FOR VISTA INTERACTIVE PHONE MODULE



SWITCH POSITION	* DIP SWITCH SETTINGS																													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	-	ON	-	ON	-	ON	-	ON	-	ON	-	ON	-	ON	-	ON	-	ON	-	ON	-	ON	-	ON	-	ON	-	ON	-	ON
2	ON	-	-	ON	ON	-	-	ON	ON	-	-	ON	ON	-	-	ON	ON	-	-	ON	ON	-	-	ON	ON	-	-	ON	ON	-
3	ON	ON	ON	-	-	-	-	ON	ON	ON	ON	-	-	-	-	ON	ON	ON	ON	ON	-	-	-	ON	ON	ON	ON	-	-	-
4	ON	ON	ON	ON	ON	ON	ON	-	-	-	-	-	-	-	-	ON	ON	ON	ON	ON	ON	ON	ON	ON	-	-	-	-	-	-
5	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CONNECTING THE ADEMCO VOICE INTERFACE MODULE (VIM)

Programming Information For the 6139AV Keypad

- Chime option for other partition during 2-way voice session.
- VIM text option for displaying voice mode text at the keypad.
- VIM AC loss option, when enabled, allows 2-way voice communication after AC loss (recommended for installations where someone is on a life support device)
- The AUTO CALLBACK option, when enabled, allows callback to initiate 2-way voice communication, otherwise "listen in to follow" (event code 606) is sent at end of alarm report.
- Device address as programmed at the keypad (01-15). Address 00 not applicable. NOTE: Address 04 is reserved for the 4285 phone module.
- Device type "8".
- Voice keypad number (01–16); this is the keypad's identification number from the central station operator's point of view. 01–06 is recommended.
- Keypad's partition (1–2).
- Keypad's sounder option (0–2)

Program VIM fault and siren silencing options by using the #93 Menu Mode - Relay Programming menu (see Section 4 in the *PART 2. PROGRAMMING GUIDE* section of this manual).

AAV Notes

1. The 685 Receiver software must be rev. 4.6 or higher. Earlier versions will not hold the phone line connection, or if AUTO CALLBACK is enabled, any receiver can be used.
2. Contact ID code for "listen-in to follow" is "606" if AUTO CALLBACK is disabled.
3. Field 1*60 must be set for "0" when using the Ademco VIM module. If using another manufacturer's AAV module, enter "1".

NOTE: If set to "1", zone 5 is no longer available as a protection zone.

4. Contact ID (field *45 =1) is the only reporting format that will send a "listen-in to follow" message if AUTO CALLBACK is disabled.
5. Listen-in to follow message is sent only if both the VIM and at least one 6139AV 2-way voice keypad is programmed using #93 Device Programming mode if AUTO CALLBACK is disabled.
6. Operator callback and AUTO CALLBACK option is enabled if a non- leading-zero 4-digit number is programmed in field 1*59.
7. Make sure that field *44 (RING DETECTION COUNT) is **not** set to "01".

6139AV Keypad Audio Level Adjustment

The 6139AV's audio level for "talk mode" and "VOX mode" can be programmed for "high," "medium," or "low." The factory default is "high."

1. Enter the keypad's programming mode by pressing and holding down the [1] and [3] keys at the same time for 3 seconds. The keypad's address is displayed.
2. a. Press and hold down the "D" key for 2 seconds. The current **talk mode** audio level is displayed (high, medium, or low).
b. Press the [#] key repeatedly to toggle the talk mode level settings from high to medium to low until the desired level is displayed.
3. a. Press the "D" key again to enter **VOX mode** level setting. The current VOX mode audio level is displayed (high, medium, or low).
b. Press the [#] key repeatedly to toggle the VOX mode level settings from high to medium to low until the desired level is displayed.
4. Pressing the "D" key again returns to the talk mode level setting, etc. Press [*] to exit keypad programming mode.

Notes:

- The keypad returns to normal mode if no key is pressed for 30 seconds.
- Powering down the keypad does not change the level setting.
- To eliminate undesired keypad feedback (microphonics) during a 2-way audio session, reduce the VOX mode audio level one level at a time until the feedback stops.

Using A Non-Ademco Audio Alarm Verification (AAV) Unit

If you prefer to use another manufacturer's AAV unit in place of the Ademco VIM unit, contact the manufacturer for information regarding the wiring of their unit to the VISTA-40. When using another manufacturer's AAV unit, see Notes below.

Some AAV modules allow remote triggering by ring detection at the alarm installation. Please be advised that if this option is selected, it may defeat modem download and 4285 phone module remote access capability. To prevent this, disable the remote AAV module trigger option. The control also requires that the AAV module trigger type is falling edge.

IMPORTANT NOTES:

- 685 Receiver software must be rev. 4.6 or higher. Earlier versions will not hold the phone line connection.
- Field 1*60 must be set for "1."
Note: When this field is set to "1", zone 5 can no longer be used as a protection zone.



The purpose of zone 5 is to silence the sounders on the control when an open circuit condition occurs, signalling the start of an AAV session. The open circuit must be triggered by the AAV module (i.e., a relay). Contact the AAV module's manufacturer for specific details.

- Zone 5 must be assigned a response type 10.
- Field 1*46 must be set for "3" if the AAV unit requires a trigger. See "Using A Trigger To Activate Another Manufacturer's AAV Unit" in the **VOLTAGE TRIGGER (Connector J7)** in Section 5 previously.
- If using a relay, such as the Ademco 4204, select "60" for System Operation, (see "Relay Programming" in **Section 4. PROGRAMMING WITH #93 MENU MODE**).
- Contact ID code for "listen-in to follow" is "606."
- Contact ID (field *45 = 1) is the only reporting format that will send a "listen-in to follow" message.

Section 9. EXTERNAL SOUNDERS

Relay Output The Control provides a wet bell relay output which is used to power external alarm sounders. Connections are made to terminals 4 (positive output) and 5 (negative return). See SUMMARY OF CONNECTIONS Diagram.

UL Household Installations For installations which must provide UL Listed protection, the total current drawn from this output and the auxiliary power output, combined, must not exceed 750mA in order to comply with the battery independence requirements. If two System Sensor PA400 piezo alarm sounders, wired in parallel, are used (24mA total), then 726mA (750mA – 24mA) is available for auxiliary output use.

UL This control complies with National Fire Protection Association (NFPA) requirements for temporal pulse sounding of fire notification appliances.

Non-UL Installations For non-UL installations, the total current drawn from this output can be up to 2.8 amps. A battery must be installed since current in excess of 750mA is supplied by the battery. Up to two 702 sirens can be used, wired in series. Up to two 719 sirens can be used wired in parallel.

Important: Going beyond the above mentioned limits will overload the power supply or may possibly trip the bell output circuit protector.

Compatible Sounders **UL** Use only UL Listed sounding devices for UL installations.

702
Outdoor Siren (not UL Listed)

- Self-contained siren (driver built-in) and weatherproof for outdoor use. Can be wired for either a steady or yelp sound and is rated at 120 dB @ 10 feet. This siren can also be tamper protected, or can be mounted in a metal cabinet (716), which can be tamper protected.

719
Compact Outdoor Siren (not UL Listed)

- Compact, self-contained siren (driver built-in), and weatherproof for outdoor use. Can be wired for either a steady or yelp sound, and is rated at 90 dB @ 10 feet. A 708BE cabinet is available, which can be tamper protected if necessary.

740
High Intensity Sounder

- Compact high intensity sounder rated at 123 dB @ 10 feet. This sounder emits an "ear piercing", high frequency sound. This sounder can be mounted indoors (bracket included) or outdoors (in 708BE cabinet).

747
Indoor Siren

- Attractive, self-contained indoor siren (driver built-in), provides steady or warble tones and is rated at 95dB @ 10 feet.

ABB1031
Motor Bell & Box

- AMSECO motor bell & box, rated at 81 dB @ 10 feet.

PA400B (beige)
PA400R (red)
Indoor Piezo Sounder

- System Sensor indoor piezo sounder (red or beige), rated at 90 dB @ 10 feet.

PART 2

PROGRAMMING PROCEDURES

Section 1. GENERAL PROGRAMMING PROCEDURES

GENERAL INFORMATION

Review the global and specific partitioning features listed in the GENERAL INFORMATION section of the Installation Instructions before programming the system.

The system is shipped with a set of pre-programmed default values that are designed to meet the needs of many installations. These can be changed by the installer to suit specific needs if desired, by using a 6139 (AV) alpha keypad*. In addition, four sets of pre-programmed communication default values can also be loaded by the installer, each set designed for a specific communication format. These too can be changed to suit the needs of a particular installation.

Changes to these pre-programmed values can be programmed directly from the alpha keypad or from an IBM compatible computer either remotely (using an approved modem) or at the job site (direct wire downloading using the 4100SM Serial Module). Both methods use the Ademco's V-Link[®] downloading software (Rev. 4 or higher) or Ademco's *Compass* Windows downloading software (be sure that the software version used includes a VISTA-40 selection).

For alpha keypads, English Language descriptions of the zones and a custom installer message (which appears when the system is ready to arm) can be programmed using the built-in vocabulary of words (see #93 MENU MODE, ALPHA PROGRAMMING section).

* NOTE: The factory loaded defaults (*97) enable keypad addresses 00-03 only. A keypad with one of these addresses must be used to program the system. If necessary refer to "Setting the Keypad Address" in Section 4.

User-Friendly Zone, Device & Alpha Programming (#93 Menu Mode)

To help set up a partitioned environment quickly and accurately, a user friendly menu mode has been added. Instead of the traditional method of programming all the fields associated with zones and the partitions they are associated with, you may now logically program a zone for all its characteristics as prompted by the keypad (refer to the #93 MENU MODE section for details). This ensures that you assign each zone to a partition and that a zone response type has been assigned.

This User Friendly Menu Mode steps you through the programming options by prompting you to answer simple yes/no questions. In addition to zone programming, this mode is also used for programming remote keypad characteristics, for entering alpha descriptors for wireless & polling loop module serial number "enrolling" and for relay programming.

Communication Default Programming

There are four sets of pre-programmed communication defaults available, including Low Speed, 4+2 Express, Ademco High Speed, and Ademco Contact ID. Loading one of these defaults automatically programs industry standard report codes that will suit most of your needs. These codes can also be changed as required. Refer to the COMMUNICATION PROGRAMMING section for instructions.

Entering The Various Program Modes

Data Field Programming mode can be entered in one of two ways.

- A) By depressing the [*] and [#] keys at the same time within 30 seconds after power is applied to the Control. This method can be suppressed in program field 1*65.
- B) By keying the installer code, followed by depression of [8]+ [0]+ [0] keys. The factory installer code can be changed once in the program mode. This method can be suppressed by exiting program mode via *98.

After entry into the program mode, the following will be displayed on an alpha keypad:

Program Mode
* Fill # View - 00

Following this display, the system is ready to be programmed.

#93 Menu Mode is entered by pressing #93 while in data field programming mode.

Programming Steps

IMPORTANT:

The programming scheme is different than other Ademco controls and from previous versions of the VISTA-40. Be sure to review these steps before attempting to program this system.

- 1. Set the keypads to the appropriate addresses.**
- 2. Set factory defaults by pressing *97.**

This will automatically enable keypad addresses 00-03, so be sure at least one keypad is set to one of these addresses.
- 3. Program system-wide (global) data fields**

Using the programming form as a guide, enter program mode and program all system wide programming fields, including phone numbers, as well as any other programming fields required to customize the system to the needs of the installation. These options affect the entire system, regardless of partitions. They include control options, downloader and dialer options, RF options, event logging options, etc. Refer to the PROGRAMMING DATA FIELDS section for a listing of the program fields arranged by function.

Note that field 2*00 (number of partitions) & field 1*32 (RF expander type) must be programmed before continuing.
- 4. Program partition-specific fields**

When the system-wide fields have been programmed, program all partition-specific programming fields by first pressing [*][9][1] to select a partition 1-2 (while still in data field program mode). Then enter the first partition-specific field number *09. The next partition-specific field will automatically be displayed when you are finished entering the value for field *09. Partition-specific fields can have different values for each partition. To program the fields for the next partition, press *91, enter the desired partition number, then enter field *09. Refer to the PROGRAMMING PARTITION SPECIFIC FIELDS section for detailed instructions.
- 5. Use #93 Menu Mode for device programming**

Refer to the DEVICE PROGRAMMING section to assign keypad ID numbers and default partitions for each keypad, and to selectively suppress certain keypad sounding. Use this mode to assign RF receivers (4281, 5881), output devices (4204 relay module), 4285 phone module and the VIM voice interface module as well.
- 6. Use #93 Menu Mode for zone programming**

Refer to the ZONE PROGRAMMING section to program zone response types, assign right loop zones and wireless zones, and assign zones to partitions and program dialer reports.
- 7. Use #93 Menu Mode for programming alpha descriptors**

Refer to the ALPHA PROGRAMMING section to enter zone and partition descriptors and a custom installer's message.
- 8. Use #93 Menu Mode for programming relays, relay voice descriptors and custom word voice substitutes.**
- 9. Set Communication Defaults**

Refer to the COMMUNICATION PROGRAMMING section for further instructions if one of the four communication default programming sets is to be used.
- 10. Exit Programming Mode**

Exit programming mode by pressing either *98 or *99. A second entry of *99 is required if the exit is being done from fields 1*00 and above.

To prevent re-access to Programming mode using the Installer's code, use *98. The only way to re-access Programming mode is by depressing both the [*] and [#] keys at the same time within 30 seconds of power up.

Exiting by using *99 always allows reentry into Programming mode using the Installer's code. Either way of exiting will allow access via downloading.

IMPORTANT: If local programming lockout is set via downloading, programming mode cannot be entered at the keypad.

Section 2. ZONE TYPES

Zone Types & Applicable Sensors

The VISTA-40 supports up to 64 zones of hard-wire, polling loop and/or wireless protection, distributed among up to 2 partitions. The following table lists the zone numbers and the types of sensors that can be used with each in this system:

Zone	Sensors
1	2-wire smoke detectors (if used)
7	keyswitch (if used)
8	latching type glass break detectors (if used)
1-9	traditional hard-wired zones
1-63	5700 series wireless devices
1-63	5800 series wireless devices
10-64	polling loop devices
95	* & 1 panic, or A key
96	# & 3 panic, or C key
99	* & # panic, or B key

Each zone must be assigned to a zone type, which defines the way in which the system responds to faults in that zone. In addition, there are three keypad activated zones (PANIC keys, see note at the end of the definitions) for each partition, a polling loop supervision zone, and four RF supervisory zones, two for each RF Receiver installed. Zone types are defined below.

Type 00
Zone Not Used

Program a zone with this zone type if the zone is not used.

Type 01
Entry/Exit #1 Burglary.

This zone type provides entry delay whenever the zone is faulted if the control is armed in the Away or Stay modes. When the panel is armed in the Instant or Maximum modes, no entry delay is provided. Exit delay begins whenever the control is armed, regardless of the arming mode selected. These delays are programmable. This zone type is usually assigned to sensors or contacts on doors through which primary entry and exit will take place.

Type 02
Entry/Exit #2 Burglary.

This zone type provides a secondary entry delay whenever the zone is faulted if the panel is armed in the Away and Stay modes. When the panel is armed in the Instant or Maximum modes, no entry delay is provided. Secondary exit delay begins whenever the control is armed, regardless of the arming mode selected. These delays are programmable. This zone type is usually assigned to sensors or contacts on doors through which secondary entry and exit will take place, and where more time might be needed to get to and from the keypad. Delay time must be greater than Zone type 1. (Ex.: a garage, loading dock, or basement door)

Type 03
Perimeter Burglary.

This zone type gives an instant alarm if the zone is faulted when the panel is armed in the Away, Stay, Instant or Maximum modes. This zone type is usually assigned to all sensors or contacts on exterior doors and windows.

Type 04
Interior, Follower.

This zone type gives a delayed alarm (using the programmed Entry/exit time) if the Entry/Exit zone is faulted first. Otherwise this zone type gives an instant alarm. This zone type is active when the panel is armed in the Away or maximum modes. Maximum mode eliminates the delay though. **This zone type is bypassed automatically when the panel is armed in the Stay or Instant modes.** This zone type is usually assigned to a zone covering an area such as a foyer, lobby, or hallway through which one must pass upon entry (After faulting the entry/exit zone to reach the keypad to disarm the system.) Since this zone type is designed to provide an instant alarm if the entry/exit zone is not violated first, it will protect an area in the event an intruder hides on the premises prior to the system being armed, or gains access to the premises through an unprotected area.

**Type 05
Trouble by Day/Alarm
by Night.**

This zone type will give an instant alarm if faulted when armed in the Away, Stay, Instant or Maximum (night) modes. During the disarmed state (day), the system will provide a latched trouble sounding from the keypad (and a central station report, if desired). This zone type is usually assigned to a zone which contains a foil-protected door or window (such as in a store), or to a zone covering a "sensitive" area such as a stock room, drug supply room, etc. This zone type can also be used on a sensor or contact in an area where immediate notification of an entry is desired.

**Type 06
24-hour Silent Alarm.**

This zone type sends a report to the Central Station but provides no keypad display or sounding. This zone type is usually assigned to a zone containing an Emergency button.

**Type 07
24-hour Audible Alarm.**

This zone type sends a report to the Central Station, and provides an alarm sound at the keypad, and an audible external alarm. This zone type is usually assigned to a zone that has an Emergency button.

**Type 08
24-hour Auxiliary
Alarm.**

This zone type sends a report to Central Station and provides an alarm sound at the keypad. **(No bell output is provided)**. This zone type is usually assigned to a zone containing a button for use in personal emergencies, or to a zone containing monitoring devices such as water sensors, temperature sensors, etc.

**Type 09
Supervised Fire. (No
Verification)**

This zone type provides a fire alarm on short circuit and a trouble condition on open circuit. The bell output will pulse when this zone type is faulted. This zone type is always active and cannot be bypassed. **This zone type can be assigned to any hard-wired zone except zone 9, any polling loop zone, and certain wireless zones.**

**Type 10
Interior w/Delay.**

This zone type gives entry delay (using the programmed entry delay 1 time), if tripped when the panel is armed in the Away mode. This zone type is also active during maximum mode, but no delay is provided (alarms occur immediately if zone is tripped). **This zone type is bypassed when the panel is armed in the Stay or Instant modes.** Delay begins whenever sensors in this zone are violated, regardless of whether or not an entry/exit delay zone was tripped first.

**Type 20
Arm-Stay***

This is a special-purpose zone type used with 5800 series wireless pushbutton units which will result in arming the system in the STAY mode when the zone is activated.

**Type 21
Arm-Away***

This is a special-purpose zone type used with 5800 series wireless pushbutton units which will result in arming the system in the AWAY mode when the zone is activated.

**Type 22
Disarm***

This is a special purpose zone type used with 5800 series wireless pushbutton or contact closure or opening, and which will result in disarming the system when the zone is activated.

**Type 23
No Alarm Response**

This zone type can be used on a zone when an output relay action is desired, but with no accompanying alarm (ex. lobby door access).

* These zone types **are not for use** by 5700 series devices.

NOTE FOR PANIC KEYS

Keypad panic zones share the same zone response type for both partitions, but panics may be individually enabled for each partition.

IMPORTANT! FAULT ANNUNCIATION

Phone module, RF, VIM and polling loop faults (zones 87, 88-91, 93 & 97) will report as trouble conditions only, and as such, should be assigned either zone type 00 if no annunciation is desired, or zone type 05 if annunciation as trouble condition is desired. See FAULT ANNUNCIATION notes in POLLING LOOP and WIRELESS EXPANSION sections for more information.

Section 3. DATA FIELD PROGRAMMING

PROGRAMMING SYSTEM-WIDE (GLOBAL) DATA FIELDS

General Procedure The global (i.e. non partition-specific) programming fields are grouped into three sets (referred to as "pages"), as represented in the diagram below. The first page of fields is accessed automatically after entering a field number. To access the other pages of fields (indicated on the programming form by a "1" or "2" in front of the 2-digit field address), press *94. Note that the alpha keypads display the words ALT PROGRAM MODE along with a "1" or "2", depending on which page of programming fields are accessed, to indicate the higher page of fields. To return to the previous page of fields, press *99.

**Enter programming mode
(installer code + [8] + [0] + [0])**

**Enter the first field number (ex. *00, installer's code)
to move to first page**

First Page of fields (*00-*90)

**press *99 or *98
to exit program
mode**

press *94 to move to 2nd page press *99 to move back to 1st page

second page of fields (1*01-1*76)

press *94 to move to 3rd page press *99 to move back to 2nd page

third page of fields (2*00-2*21)

To program specific data fields, press [*] plus the 2-digit field address, then make the required entry. The keypad will beep when a field has been completely programmed and will automatically display the next field in sequence. Partitioned programming fields are skipped (refer to PARTITIONING PROGRAMMING paragraph). If the number of digits that you enter in the data field is less than the maximum permitted (ex. phone number), the keypad displays the last entry and waits. To proceed, the next data field to be programmed must be entered manually (ex. press [*][0][5]).

To view the contents of a data field, press [#] plus the 2-digit field address. The field's entries will be displayed, but no changes can be made.

In case of errors: If an address is improperly entered, the keypad will display FC. If a program entry is improperly entered (for example, a larger number than that which is permitted), the keypad display will go blank. In either case, simply re-enter the correct number.

SUMMARY OF DATA FIELD PROGRAMMING COMMANDS	
* 9 4	Next page of fields
* 9 9	Previous page of fields or exit programming mode with no installer lockout
* 9 1	Select partition for programming partition-specific fields
# 9 3	Enter Zone/Alpha/Device Programming mode
* 9 8	Exit programming mode with installer code lock-out

INDEX TO PROGRAMMING FIELDS

In the following pages, the programming fields have been arranged by functional group. Use this index to cross reference the numerical ordered fields on the programming form with the text.

Field	Group	Field	Group	Field	Group
*00	Control	*50	Dialer	1*06	#93 Menu Mode
*02	#93 Menu Mode	*51	Dialer	1*07	#93 Menu Mode
*03	#93 Menu Mode	*52	Dialer	1*08	#93 Menu Mode
*04	#93 Menu Mode	*53	Dialer	1*09	#93 Menu Mode
*05	#93 Menu Mode	*54	Dialer	1*28	Wireless
*09	Partition-Specific	*55	Dialer	1*29	Wireless
*10	Partition-Specific	*56	Dialer	1*30	Wireless
*11	Partition-Specific	*57	Dialer	1*31	Wireless
*12	Partition-Specific	*58	Dialer	1*32	Wireless
*13	Partition-Specific	*59	Dialer	1*33	Dialer
*14	Control	*60	Dialer	1*34	Dialer
*15	Control	*61	Dialer	1*35	Dialer
*16	Partition-Specific	*62	Dialer	1*36	Dialer
*17	Control	*63	Dialer	1*37	Dialer
*18	Control	*64	Dialer	1*38	Dialer
*19	Control	*65	Dialer	1*39	Dialer
*20	Control	*66	Dialer	1*40	Dialer
*21	Control	*67	Dialer	1*41	Dialer
*22	Partition-Specific	*68	Dialer	1*43	Partition-Specific
*23	Partition-Specific	*69	Dialer	1*44	Wireless
*24	Control	*70	Dialer	1*45	Partition-Specific
*25	Control	*71	Dialer	1*46	Control
*26	Control	*72	Dialer	1*47	Partition-Specific
*27	Control	*73	Dialer	1*48	Wireless
*28	Control	*74	Dialer	1*49	Wireless
*29	Partition-Specific	*75	Dialer	1*52	Partition-Specific
*30	Dialer	*76	Dialer	1*53	Downloading
*31	Dialer	*77	Dialer	1*57	Wireless
*32	Partition-Specific	*78	Dialer	1*58	Wireless
*33	Dialer	*79	Dialer	1*59	Control
*34	Dialer	*80	Dialer	1*60	Control
*35	Downloading	*81	Dialer	1*70	Event Logging
*36	Downloading	*82	Dialer	1*71	Event Logging
*37	Downloading	*83	Control	1*74	Scheduling
*38	Partition-Specific	*84	Partition-Specific	1*75	Scheduling
*39	Partition-Specific	*85	Partition-Specific	1*76	Partition-Specific
*40	Dialer	*86	Control	2*00	Partitioning
*41	Control	*87	Partition-Specific	2*01	Real-Time Clock
*42	Dialer	*88	Partition-Specific	2*02	Real-Time Clock
*43	Dialer	*89	Dialer	2*17	Partitioning
*44	Dialer	*90	Partition-Specific	2*18	Partition-Specific
*45	Dialer	1*01	#93 Menu Mode	2*19	Partitioning
*46	Dialer	1*02	#93 Menu Mode	2*20	Partition-Specific
*47	Dialer	1*03	#93 Menu Mode	2*21	Control
*48	Dialer	1*04	#93 Menu Mode		
*49	Dialer	1*05	#93 Menu Mode		

DATA FIELD DESCRIPTIONS

The following section arranges the global (system wide) program fields into the following functional groups:

Control Options
Downloading Options
Dialer Options
Wireless Options
Partitioning Options
Event Logging Options

Note that zone response types can be programmed in fields *02-*05 & 1*01-1*09, but it is recommended that they be programmed via the #93 Menu Mode. For this reason, these fields are not discussed in this section.

Control Options

- * 00 Installer Code** The Installer's Code is a 4-digit code reserved for installation company use, but can be used by the customer if needed. This is the only code that can be used to enter the Program mode from the keypad. This code cannot be used to disarm the system if not used to arm, or if Quick Arm was used to arm system. This code cannot reenter programming mode if exited by the *98 command.
- * 14 Zone 9 Response Time** Enter **1** to set fast response mode (10 mSec) for appropriate devices wired to zone 9. Enter **0** for normal response, 350 msec. Must be **0** for UL.
- * 15 Keyswitch Assignment** Enter the partition number **1-2** in which the keyswitch is being used; otherwise, enter **0**. Requires the use of zone 7 wired loop (zone 7 no longer available as protection zone when used for keyswitch operation). If the keyswitch is used, the fire and panic alarm voltage triggers automatically become ARMING and READY status outputs for support of the Keyswitch LEDs. NOTE: Zone type 10 is automatically assigned to zone 7 if a keyswitch is used. Reports openings/closing by user "0" if reporting is enabled in field *40.
- * 17 AC Loss Keypad Sounding** Entering **1** enables sounding at the keypad (rapid beeping) when AC power is lost is desired. Enter **0** if no AC power loss keypad sounding is desired.
- * 18 UL AC Loss Siren** Entering **1** enables the external alarm sound after AC power has been out for 4 hours; otherwise enter **0** (no alarm).
- * 19 Randomize AC Loss Report** Enter **1** to randomize AC loss reporting between 10-40 min. after an actual AC loss. Enter **0** for normal AC loss reporting (about 2 minutes after actual AC loss). Selecting this option helps prevent an overload of AC loss messages at the central station during a community blackout.
- * 20 Phone Module Phone Code** If an 4285 phone module is being used, enter the 2-digit phone code used to access the system. Enter 01-09 for first digit, and enter 11 (for T) or 12 (for #) for second digit. To disable the phone module, enter 00 for the 1st digit and enter 11 for the 2nd digit of the code (disable code = [0T]). Must be disabled for UL installations.
- * 21 Prevent Fire Time-Out** Enter **1** to disable (no timeout) the alarm sounder duration for any zone designated as a fire zone, regardless of partition, so that fire sounding continues until the system is reset. Enter **0** if the normal burglary alarm sounder duration (programmed in partition-specific field *13) should apply to fire alarms.
- * 24 Ignore Expansion Zone Tamper** Only applicable if certain polling loop RPMs or 5800 series transmitters are used. This option is used to disable this module's tamper detection. Enter **1** to disable. Enter **0** if tamper detection is desired.
- * 25 Burg. Trigger For Response Type 8** This field allows optional triggering of the voltage output on pin 7 of the J7 header for zone response type 8 (24hr. auxiliary). The **0** disable selection is useful if J7 header pin 7 is used for a panic trigger, and non-panic devices are used for all zones assigned to zone response type 8 (e.g. water sensor, temp. sensor). If disabled, only burglary or audible panic alarms will trigger pin 7. Otherwise, enter **1**.
- * 26 Intelligent Test Reporting** Enter **1** if it is desired that no test report be sent if any other type of report was sent since the last test report. Enter **0** if test reports are to be sent at the set intervals, regardless of other reports having been sent. Must be **0** for UL applications.

Control Options (continued)

- * 27 **Test Report Interval** Enter the test reporting interval in hours, **001-199**. Enter **000** if no test reporting is desired. If a test report is desired, enter a test code in fields *81 & *82, location 7. Max. 024 for UL.
- * 28 **Power Up In Previous State** Enter 1 if it is desired that upon power-up, the system will assume the system status prior to power down. Enter 0 if it is desired that the system will always power up in a disarmed state. When the system powers up armed, an alarm will occur 3 minutes after arming if a zone is faulted. When so armed, reports closing as User #0 if open/close reporting for installer was enabled in field *39. Note that if the previous state was armed AWAY or STAY, the system may not respond to sensor changes for a small period of time (1-3 min.), which allows time for sensors such as PIRs to stabilize. Must be 1 for UL applications. Instruct users that authority levels 0 or 5 cannot be used to disarm the system if control powers up armed.
- * 41 **Normally Closed or EOLR (Zones 2-8)** Enter 0 if end-of-line resistors are to be used. Enter 1 if end-of-line resistors are not to be used (normally closed loops that detect only an open and do not require end-of-line resistors). Must be 0 for UL.
- * 83 **First Test Report Time** Enter the day (**01-07**) and time (**00-23 hours/00-59 min.**) that the first test report shall be transmitted. **00** entry in all locations signifies immediately upon exiting. Note that day 01=Monday. See fields *81 & *82 for assigning the Test Report code. Do not use "00" for the day unless the other locations are also "00".

* 86 **4208 Module Zone Assignment**

4208 Zone #s available when:	
*86 = 1	*86 = 0
10-17 Precludes use of any other polling loop expansion.	10-16 17-32 33-40 41-48 49-56 57-64
Note: When *86 = 1 4208 DIPs must be set to:	
With word "OFF"	With word "ON"
sw 2 = ON	sw 2 = OFF
sw 3 = ON	sw 3 = OFF
sw 4 = ON	sw 4 = OFF
sw 5 = OFF	sw 5 = ON

Entering 1 allows a single 4208 to be set to zone numbers 10-17 (see table), but precludes the use of any other polling loop expansion. Enter 1 only when the total polling loop expansion consists of a single 4208 module programmed for zones 10-17. No other polling loop expansion is supported with this setting. Enter 0 for all other configurations, such as no 4208, more than one 4208 or other polling loop expansion present. Note: The addresses must match the table to the left.

2nd PAGE FIELDS (PRESS *94 TO DISPLAY "1" PREFIX)

- 1*46 **Auxiliary Output Enable** Enter 0 if ground start output is required; enter 1 if the auxiliary output will be used to produce an open/close trigger (produced only if **all** partitions are armed); enter 2 if the auxiliary output will be used to produce keypad-like sounding at an auxiliary sounder (ex. 706-12) This option applies only to the partition set in field *15. Enter 3 to allow the ground start line to function as a two-way audio (AAV) trigger if using another manufacturer's AAV unit.
NOTE: Only one of the above options can be active within a system.
- 1*59 **VIM Audio Callback ID** Enter the 4-digit callback code (0-9 for each digit, except no "0" as first digit). This code is re*quired when the central station operator wants to re-initiate a 2-way voice session (after previously canceling the session by pressing "88"). Entering a leading 0 disables operator callback.
- 1*60 **VIM AAV Module** Must be "0" for Ademco VIM module. If using another manufacturer's AAV unit, set to "1". Note: If set to "1", zone 5 is no longer available as protection zone.

3rd PAGE FIELD (PRESS *94 TO DISPLAY "2" PREFIX)

- 2*21 **Supervision Pulses For LORRA Trigger Outputs** Used for supervised connection to 7920SE. Enter 1 to enable pulses for each type of LORRA triggers. This option causes the control to send periodic short pulses on the J7 radio triggers. These pulses are used by the 7920SE to determine that its connection to the control is still intact. Enter 0 if not desired.

Downloader Options

- *35 Download Phone No.** This field is applicable only if downloading will be utilized. Enter the downloading phone number, up to 12 digits (0-9), or #11 (*), #12 (#), #13 (Pause). Do not fill unused spaces.
- *36 Download ID No.** Enter 00–09; A-F (10–15). Only applicable if downloading will be utilized. Make entries as 2-digit numbers as follows:
00=0 03=3 06=6 09=9 12=C 15=F
01=1 04=4 07=7 10=A 13=D
02=2 05=5 08=8 11=B 14=E
- *37 Download Command Enables** Each of the various remote (from the central station) functions can either be enabled or disabled. Disabling a function means that the central station will not be able to perform that function with respect to this system. Enter **1** to enable a function, and **0** to disable a function. See field 1*53 for Callback disable option. For UL installations, all entries must be **0**.

2nd PAGE FIELD

- 1*53 Download Callback** Enter **1** if callback is not required when downloading. Enter **0** if callback is required. Must be **0** for UL.

Dialer Options

- *30 Touch-Tone Or Rotary Dial** Enter **1** if TouchTone service is being used. Enter **0** if rotary phone service is used.
IMPORTANT!: Do not select a dialing method that is not legally permitted by the telephone company for the particular subscriber. If selecting touch-tone, make sure the subscriber has requested and is paying for touch-tone service. Note that whether or not touch-tone dialing for call placement is permitted, communication by the use of DTMF signaling (Ademco High Speed) will still take place. See field 1*33 for Touch-Tone w/Rotary backup.
- *31 PABX Access Code** This field is used to enter up to four 2-digit numbers 00-09; B-F (**11-15**). If not required, enter nothing and proceed to next address; otherwise, enter prefix needed to obtain an outside Telco line. This field may be used alternatively to enter a prefix that can suppress the Telco's call waiting feature from interfering with outgoing transmissions. This prefix is only useful if the Telco option to suppress call waiting has been obtained by your customer. The prefix to be used is 01010700 if rotary dialing is being used or 140700 if touch-tone dialing is being used. Each entry is a 2-digit entry so as to allow use of hexadecimal digits (B-F). Do not use hexadecimal digit **A**. Only enter digits required. Do not fill unused spaces.
- *33 Primary Phone Number** Enter the primary phone number, up to 12 digits, **0-9**, or #11 (*), #12 (#), #13 (Pause). This is the phone number the control will use to transmit alarm and status messages to the central station. Do not fill unused spaces. Note that back-up reporting (8 calls are made to the secondary phone number if no acknowledgment is received after 8 attempts to the primary number) is automatic only if a secondary phone number is entered.
- *34 Secondary Phone Number** This field enables backup reporting if field *51 Dual Reporting and/or 1*34 Split Reporting is not enabled. Enter the secondary phone number, up to 12 digits, **0-9**, or #11 (*), #12 (#), #13 (Pause). The secondary phone is the number that the control will use if communication on the primary number is unsuccessful. Do not fill unused spaces. If this field is programmed, a secondary subscriber account number (field *90) *must* also be programmed (can be the same as the primary account number).
- *40 Open/Close Reporting For Keyswitch** Enter **1** if open/close reporting for the keyswitch is desired. Enter **0** if reporting is not desired.
- *42 Dial Tone Pause** This field sets the delay time for the Dial Tone Detect option, if true dial tone is not selected in that field. Enter the desired wait time for dial tone detection as follows: Enter single digit, **0** = 5 secs; **1** = 11 secs; or **2** = 30 secs. Must be **0** for UL.

Dialer Options (continued)

- * 43 Dial Tone Detection** Determines whether the control will wait for a true dial tone before dialing, or if it will wait for a predetermined delay before dialing (delay is programmed in Dial Tone Pause field *42). The latter may be necessary in high-noise environment Telco networks where noise can be confused with dial tone, resulting in premature dialing. Enter **1** for true dial tone wait. If no dial tone is detected, will dial at end of pause programmed in field *42. Enter **0** to pause for seconds entered in field *42, then dial.
- * 44 Ring Detection Count** Only applicable if central station initiated downloading will be used. Enter **00** to disable ring detection. Enter **01-14** for ring counts of 1-14. Enter **15** to select answering machine mode that allows the system to receive calls even when a telephone answering machines is connected to the same phone line. In the answering machine mode, the download caller should let the phone ring once, then hang up, then call again within 30 seconds. The system, upon hearing one ring followed by nothing, will not answer that call, but will ready itself to pick up on the first ring the next incoming call that is received within 30 seconds (the downloader calling again). DO NOT USE "00" if 4285 Phone module is being used. DO NOT USE "01" if the VIM module is being used.
- * 45 Primary Format** This field selects the reporting format for use on the primary telephone line. Enter the appropriate number for the primary format as follows: 0=Low Speed; 1=Contact ID; 2=Ademco High Speed; 3=Ademco Express.
Note: Contact ID (1) is the only reporting format that will send a "listen-in to follow" message when using a n AAV unit.
- * 46 Low Speed Format (Primary)** Enter the appropriate value: **0**=Ademco Low Speed; **1**=Sescoa/Radionics
- * 47 Secondary Format** This field selects the reporting format for the secondary telephone line. Enter the appropriate number for the secondary format as follows: 0=Low Speed; 1=Contact ID; 2=Ademco High Speed; 3=Ademco Express
- * 48 Low Speed Format (Sec.)** Enter the appropriate value: **0**=Ademco Low Speed; **1**=Sescoa/Radionics
- * 49 Checksum Verification** Enter **1** for either or both primary/secondary formats to send a verification digit to validate the message at the receiver without having to send two message rounds. Valid for 3+1, 4+2, and Ademco High Speed reports. Enter **0** if not desired.
- * 50 SESCOA/Radionics Select** Enter **0** if Radionics format is to be used with hexadecimal 0-9, B-F reporting. Enter **1** if SESCOA format is to be used with only numeric reporting (0-9). This selection applies to **both** primary and secondary phone numbers.
- * 51 Dual Reporting** This field allows all reports to be sent to both primary and secondary phone numbers. Enter **1** if it is desired that all reports are sent to both primary and secondary phone numbers. If dual reporting is desired and Ademco High Speed format is to be used at all, it must be selected as **both** the primary and secondary transmission formats. If used with Split Reporting option **1** (1*34), alarms go to both primary & secondary numbers, while all other reports go to secondary only. If used with Split Reporting option **2**, open/close and test messages go to both lines, while all other reports go to primary.
- * 52 Standard/Expanded Report, Primary** Enter **0** for standard or **1** for expanded reporting for the primary phone line.
Note: Expanded overrides 4+2 format.
- * 53 Standard/Expanded Report, Secondary** Enter **0** for standard or **1** for expanded reporting for the secondary phone line.
Note: Expanded overrides 4+2 format.
- *54-*78 Report Codes For Zones 1-64, 87-99** Enter the appropriate report codes for each zone used in the system.
- * 79 Zone Type Restores For Zone Types 1-8** Enter **1** to enable restore reporting for individual zone types. Enter **0** if no restore report is desired for a zone type.

Dialer Options (continued)

- * 80 Zone Type Restores For Types 9-10** Enter **1** to enable restore reporting for individual zone types. Enter **0** if no restore report is desired for a zone type.
- *81-*82 Non-Alarm Report Codes** Enter the appropriate report codes as indicated on the programming form.
- * 89 Restore Report Timing** Enter **0** for instant restore report, as zone restores. Enter **1** for reporting after bell timeout if zone restored. Enter **2** for restore report when system is subsequently disarmed

2ND PAGE FIELDS

- 1*33 Touch-Tone W/Rotary Backup** Enter **1** to enable Rotary back-up dialing if communicator was not successful on dialing using touch-tone DTMF on first attempt. Enter **0** if this option is not to be used.
- 1*34 Comm. Split Report Selection** This field allows certain reports to be directed to either the primary or secondary phone number. Enter **0, 1, or 2**, in accordance with the following: **0** = split reporting disabled; **1** = alarm, alarm restore & cancel reports sent to primary Telco number, all others to secondary Telco number; **2** = open/close & test reports sent to secondary Telco number and all other reports to primary. See *51 for split/dual reporting comments.

1*40-1*41 Arm Stay & Time Set Report Codes

Enter the appropriate code as shown on the programming form.

Wireless Options

- 1*28 RF TX Low Battery Sound** Enter **0** if audible beep and display annunciation upon RF transmitter low battery condition is desired only in disarmed state. Enter **1** if audible beep and display is desired in both armed and disarmed states. Must be **1** for UL.
- 1*29 RF TX Low Battery Report Enable** Enter **1** if a trouble message for RF transmitter low battery conditions is to be sent to the central station. Enter **0** if no report for transmitter low battery is desired. Note that a trouble message will be sent for a transmitter supervision failure independent of this selection. Must be **1** for UL.
- 1*30 RF Rcvr Supervision Check-In Interval** Enter the check-in monitoring interval in 2-hour increments. Enter **02-15** times 2 hours (4-30 hours). Failure of a receiver to receive any RF signal within the time entered will result in activation of the response type programmed for zone 90 for the first receiver and zone 88 for the second receiver and their related communication reports. Enter **00** to disable receiver supervision. Max. "6" (12 hr) for UL.
- 1*31 RF Transmitter Check-In Interval** Enter the check-in monitoring interval in 2-hour increments; enter **02-15** times 2 hours (4-30 hours). Failure of an individual transmitter to send a supervision signal within the time entered will result in a trouble response and related communication report. Entry **00** disables transmitter supervision. Max. "6" (12 hr) for UL.
- 1*32 Receiver Type** Enter **1** if using 4281 series receivers. enter **2** if using 5881 series receivers. **0** = none.
- 1*44 Wireless Keypad Tamper Detect** Enter **1** to enable tamper detection on wireless keypad. Enter **0** if tamper detection is not desired. If this feature is enabled, any attempt to tamper by means of many trial entries at a wireless keypad will be blocked by the control panel. If more than 40 key depressions are received without a valid sequence (arm, disarm, etc.), the Control panel will disable the wireless keypad. The inhibit is removed once a valid key sequence is received from a wired keypad.
- 1*48 Wireless Keypad Assignment** Enter the partition in which the RF keypad is used, **1-2**. Enter **0** if no RF keypad is used.
- 1*49 Suppress TX Supervision Sound** Enter **1** to disable trouble sounding for transmitter check-in failure. Enter **0** if audible trouble sounding is desired. Must be "0" for UL.

Wireless Options (cont.)

- 1*57 Enable 5800 RF Button Global Arm** Enter **1** to have the system arm/disarm in accordance with the button's user's global arming settings. Enter **0** if the button is not to be used to global arm the system (however, home partition arming will still occur).
- 1*58 Enable 5800 RF Button Force Bypass** Enter **1** to allow the RF Button user to force bypass all faulted zones. When attempting to arm the system, the keypad will beep once after pressing the button, if any faulted zones are present. If this feature is enabled, the user should then press the button again within 4 seconds to force bypass those zones and arm the system. Must be disabled for UL installations.

Partitioning Options

- 2*00 Number Of Partitions** Enter the number of partitions 1-2 to be used in the system.
- 2*17 Number Of User Codes Per Partition** Enter **01-69** for each partition used in the system. Enter 01 for an unused partition. Total number of user codes in the system must be less than or equal to 70. Note that one user number is automatically assigned (installer code) to each partition, regardless of whether that partition has been enabled.
- 2*19 Use Partition Descriptors** Enter **1** if partition descriptors will be programmed. If enabled, certain keypad displays will include a partition number and the partition descriptor (if programmed in #93 Menu Mode). Entering **0** causes the keypads to display a non-partitioned system type of display (no partition number will appear).

Relay Output Options

SECOND PAGE FIELDS

- 1*74 Relay Timeout XX Minutes** Enter the relay timeout, **0-127** in multiples of 2 minutes, desired for #93 Menu Mode Relay Programming output command "56" (refer to the #93 Menu Mode section in this manual).
- 1*75 Relay Timeout YY Seconds** Enter the relay timeout, **0-127** seconds, desired for #93 Menu Mode Relay Programming command "57" (refer to the #93 Menu Mode section in this manual).

Real-Time Clock Options

THIRD PAGE FIELDS

- 2*01 Daylight Savings Time Start/End Month** Enter the months **00-12** in which daylight savings time starts and ends. Enter **00, 00** if daylight savings time does not apply to the user's region. Standard setting for U.S. is 04,10.
- 2*02 Daylight Savings Time Start/End Weekend** Enter the start and end weekends for daylight savings time as follows: **1**=first; **2**=second; **3**=third; **4**=fourth; **5**=last; **6**=next to last; **7**=third from last. Standard setting for U.S. is 01,05.

Event Logging Options

SECOND PAGE FIELDS

- 1*70 Event Log Types** Enter **1** for each of the types of events for which event logging is desired, as shown on the programming form. Otherwise enter **0**.
- 1*71 12/24 Hour Time Stamp Format** Select the type of time stamping desired: 0 = standard 12 hour; 1 = 24 hour format.

PROGRAMMING PARTITION-SPECIFIC DATA FIELDS

General Procedure

Values for some programming fields are system wide (global), and some can be different for each partition (partition-specific). If the system is set up for 2 partitions (field 2*00 = 2), the partition-specific programming fields are automatically skipped when programming the global fields. The table below lists the partition-specific fields that can be defined for each partition.

To access partition-specific fields,

1. Press *91, which will prompt you for the partition number desired.
2. Enter a partition-specific field number (ex. *09) to begin programming. When the first field's entry is completed, the next partition-specific field will automatically be displayed. When all partition-specific fields are programmed, the system returns to the global programming fields (page 1 fields). To return to the global program fields before finishing all fields, enter any global field number.
3. Repeat this procedure for each partition in the installation.

<p style="text-align: center;">PROGRAMMING PARTITION-SPECIFIC FIELDS Press *91 to select a partition Enter a Partition-Specific Field Number <table border="1" style="margin: auto;"><tr><td style="text-align: center;">Selected Partition Set of Fields</td></tr></table> Exits to global page 1 program fields Press *91 to select next partition. Enter any global field number to return to the global fields at any time.</p>	Selected Partition Set of Fields
Selected Partition Set of Fields	

Partition-Specific Field Descriptions

- | | |
|--|---|
| * 09 Entry Delay #1 | Entry delay defines the delay time which allows users to reenter the premises through a door that has been programmed as an entry delay door and disarm the system without sounding an alarm. The system must be disarmed within this period or an alarm will occur. Enter the entry delay time (01-15 times 15 seconds or 00 for no delay), up to a maximum delay of 225 seconds (entry 15 times 15 seconds), for the zone assigned to Entry Delay #1. Maximum 3 for UL installations. |
| * 10 Exit Delay #1 | Exit delay defines the delay period that allows users to leave the premises through a door that has been programmed as an entry/exit delay door after arming the system without setting off the alarm. Enter the exit delay time (01-15 times 15 seconds or 00 for no delay), up to a maximum delay of 225 seconds, for the zone assigned to Exit Delay #1. Maximum 4 for UL installations. |
| * 11 Entry Delay #2 | Entry Delay 2 is used for the zone assigned to Entry Delay #2 zone type. Note that this delay must be longer than Entry Delay #1. Maximum 3 for UL installations. |
| * 12 Exit Delay #2 | Exit delay 2 is used for the zone assigned to Exit Delay #2. Note that this delay must be longer than Exit Delay #1. Maximum 4 for UL installations. |
| * 13 Alarm Sounder Duration | Defines the length of time an external sounder and the keypad's sounder will sound for all audible alarms (multiply entry 01-15 by 2 minutes for actual duration). This duration can be overridden by the Fire Timeout Disable option (field *21) for fire alarms. Minimum 4 minutes for UL. |
| * 16 Confirmation Of Arming Ding | Enter 1 to enable 1/2 second external alarm sounding ("ding") at the end of exit delay #1. If enabled, it will also ding upon communication kissoff if sending close reports. Otherwise enter 0. |
| * 22 Keypad Panic Enables | Enter 1 to enable the appropriate keypad panics used in this partition. Otherwise enter 0. |
| * 23 Multiple Alarms | Determines whether or not more than one alarm can be sounded in a given zone during an armed period. Note that multiple alarm soundings will not occur more frequently than allowed by the programmed alarm sounder duration. This selection applies to local sounding and has no impact on the number of communication messages transmitted. Refer to Swinger Suppression for limiting communication messages. Enter 1 if this feature is desired. Enter 0 if not desired. |

Partition-Specific Field Descriptions (continued)

- *29 Quick Arm** Enter **1** to enable arming of the burglary system in AWAY, STAY, INSTANT or MAXIMUM modes by using the # key instead of the security code. When armed, reports closing as User 0 if open/close reporting for User #2 (typically a master level user) was enabled for a given partition. If quick arm is used, the installer code and authority level 5 code cannot disarm the system. Enter **0** if Quick Arm is not desired. In either case, the security code must always be used to disarm the system.
- *32 Primary Subscriber Acct #** Enter a 3 or 4 digit (depending on report format) primary subscriber account number 00-09; B-F (11-15). Each number requires a 2-digit entry so as to allow entry of hexadecimal digits (B-F). If a 3 digit account number is to be used, only enter data in the first 3 locations, leaving the last one unfilled, by entering a *.
- *38 Prevent Zone XX Bypass** Entering a zone number (01-64) prevents that zone from being bypassed by the user. Enter **00** if this feature is not desired (all zones can be bypassed). This does not affect fire zones, which the system prevents from being bypassed.
- *39 Open/Close Report For Installer Code** Enter **1** if open/close reporting for the installer is desired. Otherwise enter **0** (disable).
- *84 Swinger Suppression** This option limits the number of messages (Alarms or Troubles) sent for a specific channel in an armed period (Swinger Suppression). Enter **01-15**. If **00** is selected, all Alarm or Trouble codes are reported. Must be **00** (disabled) for UL.
- *85 Enable Dialer For Panics & Duress** Enter **1** for each panic/duress for which reporting is desired. Otherwise enter **0** (disable).
- *87 Entry Warning** Enter **0** for 3 short beeps, or **1** for slow beeps that continue for the entire entry delay period.
- *88 Burg. Alarm Comm. Delay** Enter **0** for no delay on burglary alarm communication, or **1** for 16-second delay (no delay on 24-hour reports).
- *90 Secondary Subscriber Acct #** Enter the 3 or 4 digit number (depending on report format) for the secondary subscriber account, 00-09; B-F (11-15). Each number requires a 2-digit entry so as to allow entry of hexadecimal digits (B-F). If a 3-digit number is to be used, only enter data in the first 6 locations, leaving the last two unfilled. Default=15 15 15 15. Erase the field by entering *90*. NOTE: This field *must* be programmed if a secondary phone number is used (field *34). This account number can be the same as the primary account number.

2nd Page Fields

- 1*43 Permanent Keypad Backlighting** Enter **1** if it is desired that backlighting for the keypad display remain on at all times. Enter **0** if the display should remain unlit unless a key is pressed. The backlighting then turns off again after a period of keypad inactivity. Note that when a key is pressed, display backlighting turns on for **all** keypads in that partition.
- 1*45 Exit Delay Sounding** Enter **1** if beeps from the keypads during exit delay is desired. Enter **0** for no keypad sound during exit delay.
- 1*47 Chime On Ext. Siren** Enter **1** for chime annunciation using the external alarm sounder. If not desired, enter **0**.
- 1*52 Send Cancel If Alarm + OFF** Enter **1** if no report restriction is desired. Enter **0** if cancel reports are to be sent within Bell Timeout period only.
- 1*76 Access Control Relay** The system can be programmed to provide user activated access control. If enabled, the assigned relay will pulse for 2 seconds when the user enters his code and presses "0". Enter the relay number (**00-08**) for the relay that will be used for access control. Enter **00** if not used in this partition.

3rd Page Fields

- 2*18 Enable GOTO For This Partition** Enter **1** if this partition is to be accessed by a GOTO command. Otherwise enter **0**.
- 2*20 Enable J7 Triggers By Partition** **0**=disable for displayed partition; **1**=enable for displayed partition

Section 4. PROGRAMMING WITH #93 MENU MODE

General Information

NOTE: The following fields should be preset before beginning: 2*00 (Number of Partitions); 1*32 (receiver type). In addition, receivers should be programmed via Device programming.

After programming all system-related programming fields in the usual way, press #93 while still in programming mode to display the first choice of the menu driven programming functions, which are as follows:

ZONE PROG? 0=NO 1=YES

For programming the following:

- Zone Number
- Zone Response Type
- Hardwired zone
- RF Zone
- Right/left Loop Zone
- Serial number RPM zone
- Partition Number for Zone
- Dialer report code for zone

SERIAL PROG? 0=NO 1=YES

For entering 5800 series transmitter & polling loop device serial numbers into the system.

ALPHA PROG? 0=NO 1=YES

For entering alpha descriptors for the following:

- Zone Descriptors
- Partition Descriptors
- Installer's Message
- Relay Descriptors
- Custom Words

DEVICE PROG? 0=NO 1=YES

For defining the following device characteristics for addressable devices, including keypads, RF receivers (4281/5881) and 4204 output relay modules:

- Device Address
- Keypad Options
- Device Type
- Phone Module
- Device's Home Partition
- VIM Module

RELAY PROG? 0=NO 1=YES

For defining output relay (or Powerline carrier) functions.

RLY VOICE DESCR? 0=NO 1=YES

For entering voice descriptors to be used with phone module functions.

CUSTOM INDEX #? 0=NO 1=YES

For creating custom word substitutes for phone module annunciation.

QUIT MENU MODE? 0=NO 1=YES

Enter **1** to return to data field programming mode.
Enter **0** to display the next menu selection.

Press **0** (NO) or **1** (YES) in response to the displayed menu selection. Pressing **0** will display the next choice in sequence. Refer to the "Zone Programming" section for instructions for programming zone characteristics, the "Device Programming" section for instructions for programming addressable devices, and the "Alpha Programming" section for programming alpha descriptors. The following is a list of commands used while in the menu mode.

#93 Menu Mode Key Commands

#93	Enters Menu mode
[*]	Serves as ENTER key. Press to have keypad accept entry.
[#]	Backs up to previous screen.
0	Press to answer NO
1	Press to answer YES
01-99	All entries are 2-digit entries.
00	Returns to the QUIT MENU MODE? prompt.

Zone Programming

Important!: Note that before programming zone characteristics, field 2*00 (number of partitions) and field 1*32 (receiver type) must be programmed. This identifies the use of RF Receivers and the number of partitions being used in the system.

Enter Programming mode, then press #93 to display "ZONE PROG?".

ZONE PROG?
1=YES 0=NO

Press 1 to enter ZONE PROGRAMMING mode. The following screens will appear. Press [*] to display the next screen. Press # to display a previous screen.

ENTER ZN NO.
00=QUIT 20

Enter the zone number to be programmed (01-64, 87-91, 92, 93, 95, 96, 97 or 99). Press [*] to accept entry. Enter 00 to return to the main menu selections.

Summary Screen -

Zn ZT P RC In: L
20 00 1 00 RF: N

A summary screen for that zone will appear. The "N" after the colon indicates the loop number to which the sensor is connected.

20 ZONE TYPE
ZONE DISABLED 00

Each zone in a system must be assigned to a zone type, which defines the way in which the system responds to faults in that zone. Refer to the ZONE TYPE DEFINITIONS section for definitions of each zone type. Enter the zone response type for each zone. The screen will automatically display the zone type for the number entered. Press [*] to accept entry. If a different zone response type is desired, enter a different number and press [*].

For UL applications, use of 1 or 2 RF receivers requires enabling their respective faults (88-91) as applicable (type 5).

Zone Types are as follows:

- 00 Assign for unused zones
- 01 Entry/Exit #1, burglary
- 02 Entry/exit #2,
- 03 Perimeter, burglary
- 04 Interior follower, burglary
- 05 Trouble by day/Alarm by night, burglary
- 06 24 hour silent alarm
- 07 24 hour audible alarm
- 08 24 hour auxiliary
- 09 Fire
- 10 Interior delay, burglary
- 20 Arm-stay (for 5800 transmitters only)
- 21 Arm-away (for 5800 transmitters only)
- 22 Disarm (for 5800 transmitters only)
- 23 No alarm response

20 PARTITION

Enter the partition number (1-2) in which this zone is located.

20 REPORT CODE

Enter the report code for this zone.

Zone Programming
(continued)

20 INPUT TYPE
RF TRANS. RF:

Note that input types 4 & 5 are valid for certain 5800 series transmitters only (ex. 5801, 5802, 5802CP). When using 5700 series transmitters, always set the input type to type 3. The zone number of the transmitter identifies whether or not supervision is required (ex. 5700 wireless zone number 63 is not supervised).

Enter the device type as follows: 0=device not used; 1=hardwired; 3=supervised RF transmitter (RF); 4=unsupervised RF transmitter (UR); 5=RF button type transmitter (BR); 6=serial number polling loop device (SL); 7=DIP switch type polling loop device (DP); 8=right loop of DIP switch type device (PS). Right loops refer to the use of the right loop on a 4190WH zone expander module and/or 4278 PIR, which allow hard-wired devices to be monitored by the polling loop. If the zone was programmed as input type 1, 7 or 8, the summary display appears. The display will then repeat with the zone number question for programming the other zones in the system. Enter 00 to exit back to normal programming mode.

20 LOOP NUMBER

OR

20 LEARN S/N ?
1=YES 0=NO

If this is a previously "enrolled" sensor, the loop number for this zone will appear. Press [*] to continue.

If the sensor's serial number has not been "enrolled," the serial number can be enrolled now by entering 1, or it can be enrolled later by using the "Serial Number Enrolling/Deleting" menu (see next section). Enter 0 if serial number will be enrolled later. The summary screen will then appear (see summary screen description on previous page).

20 INPUT S/N : L
A000-0000: 1

If enrolling the serial number now (entering 1 at the last prompt), this prompt appears. You can enroll transmitter serial numbers using either of two methods.

A. Fault the transmitter two times. The keypad will beep twice when it hears each transmission. When enrolling transmitters assigned as BR input type (e.g. 5802, 5802CP), allow 8 seconds between transmissions.

OR

B. Enter the serial number directly from the keypad. The serial number is located on the bar code label of the transmitter. Simply enter the 7-digit number following the letter "A" then press [*]. Enter the appropriate loop number for the zone being programmed and press [*].

When the serial number has been successfully enrolled, its number appears in the display. A typical display is shown below:

20 PROG AS RF:1
A001-3078:1

Press [*] to continue. The summary screen will then appear (see summary screen description on previous page).

Serial Number
Enrolling/Deleting

SERIAL # PROG?
0=NO 1=YES

To enroll or delete a device's serial number, enter **1** (yes). Enter **0** to move to the **Alpha Programming** menu.

ENTER ZONE NO.
00=QUIT

Enter the zone number of the device to be enrolled or deleted. Press [*] to move to the next prompt. Enter 00 to quit Serial Number programming.

If the device for that zone number was not programmed as a serial number input device in the **Zone Programming** menus, a prompt indicating such will appear. Press [*] to return to the Enter Zone No. prompt.

10 PROG AS RF: 2
A000-5372: 2

If a serial number has already been enrolled for that device, a summary prompt will appear displaying the type of device and its serial number. Press [*] to continue to the Delete S/N prompt.

DELETE S/N?
0=NO, 1=YES

Enter **1** to delete the displayed serial numbered device. Enter 0 if this device should not be deleted.

INPUT TYPE
INPUT = 0 OR 3-6

If a serial number for that device has not been enrolled yet, and if the device assigned to that zone number has been programmed as a serial number input device in the **Zone Programming** menus, this prompt will appear. Enter the device input type as follows: **0** = none, **3** = supervised RF transmitter, **4** = unsupervised RF transmitter, **5** = RF button type, **6** = serial polling loop device. Press [*] to move to the next prompt.

LEARN S/N?
0=NO, 1=YES

If adding a new serial number device to the system, this prompt will appear after entering the input type.. Enter **1** to have the system enroll the device's serial number. To enroll the serial number at a later time but retain the zone programming information, enter **0**. If 0 is entered, a zone summary screen appears (described later). Press [*] to return to the Enter Zone No. prompt to enroll another device's serial number or to exit enroll menus.

INPUT S/N:L
Axxx - xxxx:L

If 1 was entered at the Learn S/N? prompt, this screen will appear. The device's serial number can be manually entered as described in the Zone Programming section on the previous page, or it can be automatically enrolled by faulting the device at least twice (causing 2 transmissions). Two matching transmissions must be received. The keypad will beep with each transmission received. Press [*] to continue.

10 PROG AS RF:2
A000-5372:2

A summary screen will appear if the serial number was successfully enrolled. Press [*] to continue.

10 ZT P RC IN:L

A summary screen for the zone programming will appear showing the zone number, zone type (ZT), partition assignment (P), report code (RC), and input device type (IN:L). Press * to continue. The Enter Zone No. prompt will appear again.

Alpha Programming

If using an alpha keypad in the system, a user friendly English language description/location of all protection zones, partitions' keypad panics, polling loop short and RF receiver supervision faults can be programmed into the system. Each description can be composed of a combination of words (up to a maximum of 3) that are selected from a vocabulary of 244 words stored in memory, and any word can have an "s" or " 's " added to it. In addition, up to 20 installer-defined words can be added to those already in memory. Thus, when an alarm or trouble occurs in a zone, an appropriate description for the location of that zone will be displayed at the keypad. An installer's message can also be programmed for each partition which will be displayed when the system is "Ready" (ex. THE PETERSON's).

To program alpha descriptors, enter Programming mode, then press #93 to display "ZONE PROG?". Press 0 (NO) twice to display "ALPHA PROG?". Press 1 to enter ALPHA PROGRAMMING mode. There are 6 sub-menu selections that will be displayed one at a time. Press 1 to select the mode desired. Press 0 to display the next mode available. The alpha sub menu selections are:

ZONE DESCRIP.?	for entering zone descriptors.
DEFAULT SCREEN?	for creating custom message; displayed when system ready.
CUSTOM WORD?	for creating custom words for use in descriptors.
PART DESCRIP?	for creating 4-character partition names.
EXIT EDIT MODE?	Press 1 to exit back to #93 Menu Mode.

Entering Zone Descriptors

1. Select ZONE DESCRIPTOR mode.
The keypad keys perform the following functions:
 - [3] Scrolls both alphabet and actual words in ascending alphabetical order.
 - [1] Scrolls both alphabet and actual words in descending alphabetical order.
 - [2] Adds or removes an "s" or " 's " to a vocabulary word.
 - [6] Toggles between alphabet and actual word list; used to accept entries.
 - [8] Saves the zone description in the system's memory.
 - [#] # plus zone number will display the description for that zone.
2. Key *01 to begin entering the description for zone 1, (key *02 for zone 2, *03 for zone 3 etc.). The following will be displayed: * ZN 01 A
Note that the first letter of the alphabet appears after the zone number, and that the zone number is automatically included with the description.
3. One of two methods of entering the words can now be used (*assume, for example that the desired description for zone 1 is BACK DOOR*):
 - a) Press [#] followed by the 3 digit number of the first word from the fixed dictionary shown later in this section (e.g., [0][1][3] for BACK). Press [6] in order to save the word and proceed, **or...**
 - b) Select the first letter of the desired description (note that "A" is already displayed). Use key [3] to advance through the alphabet and key [1] to go backward. For example, assume the desired description for zone 1 is BACK DOOR. Press key [3] repeatedly until "B" appears, then press key [6] to display the first available word beginning with B. Repeatedly press key [3] to advance through the available words until the word BACK is displayed. Press key [1] to move backward through the word list.
To add an "s" or " 's ", press the [2] key. The first depression adds an "s", the second depression adds an " 's ", the third depression displays no character (to erase the character), the fourth depression adds an "s", etc.
To accept the word, press the [6] key, which toggles back to alphabet list.
4. For selection of the next word (DOOR), repeat step 3, but press key [3] until the desired first letter of the next word appears (in this example, "D"). Then press key [6] to display the first available word beginning with "D". Press key [3] repeatedly until the desired word (DOOR) appears. To accept the word, press the [6] key, which again toggles back to alphabet list.

Entering Zone Descriptors (continued)

5. When all desired words have been entered, press key [8] to store the description in memory.
6. To review the zone descriptions, key [#] plus zone number (e.g., #01). To edit zone descriptions, key [*] plus zone number (e.g., *01)
7. To exit the zone description mode, key 00.

NOTE: Alpha descriptor entry can be entered locally at the alpha keypad or remotely using Ademco's V-Link[®] downloading software (Rev. 4 or higher) or Ademco's *Compass Windows* downloading software..

Adding Custom Words

Up to 20 installer-defined words can be added to the built-in vocabulary. Each of the 20 "words" can actually consist of several words, but bear in mind that a maximum of 10 characters can be used for each word string.

NOTE: The phone module can be programmed to announce substitute custom words, if desired. If not programmed for substitutes, the phone module will only announce the zone number whenever the alpha keypad displays a custom word

1. Select CUSTOM WORD mode. The keys perform the following functions:
 - [3] Advances through alphabet in ascending order.
 - [1] Advances through alphabet in descending order.
 - [6] Selects desired letter; moves the cursor 1 space right.
 - [4] Moves the cursor one space to the left.
 - [7] Inserts a space at the cursor location, erasing any character at that location.
 - [8] Saves the new word in the system's memory.
 - [*] Returns to description entry mode.
2. Key the number of the custom word or word string to be created (01-20). For example, if you are creating the first word (or word string), enter 01; when creating the second word, enter 02, and so on. A cursor will now appear at the beginning of the second line.
3. One of two methods of entering the custom word's characters can now be used (refer to the CHARACTER LIST of letters, numbers, and symbols on the next page):
 - a) Press the [#] key, followed by the two digit entry for the first letter you would like to display (e.g., [6][5] for "A"), or...
 - b) Use the [3] key to advance through the list of symbols, numbers, and letters. Use the [1] key to move back through the list.When zone descriptors are being entered as described in step 3a the custom word numbers are 250 to 269 for words 1 to 20 respectively. When being entered as described in step 3b, each word will be found at the end of the group of words that begin with the same letter as it does.
4. When you have reached the desired character, press the [6] key to select it. The cursor will then move to the right, in position for the next character.
5. Repeat steps 3 and 4 to create the desired word (or words). Note that the [4] key can be used to move the cursor to the left if necessary, and that key [7] can be used to enter a blank (or to erase an existing character). Each word or word string cannot exceed 10 characters.
6. Press the [8] key to save the custom word(s) and return to the CUSTOM WORD? display. The custom word (or string of words) will be automatically added to the built-in vocabulary at the end of the group of words beginning with the same letter.
7. Repeat steps 2 through 6 to create up to 19 additional custom words (or word strings).
8. Key 00 at custom word prompt to exit the zone description programming mode.

Creating Partition Descriptors

Creating A Custom Message Display (Installer's Message)

1. Select "Part DESCRIPT." mode. The system will ask for the partition number desired. Enter the number as a single key.
2. Follow the same procedure as for CUSTOM WORDS, except that partition descriptors are limited to four (4) characters (ex. WHSE for warehouse).

Normally, when the system is in the disarmed state, the following display is present on the Keypad.

```
**** DISARMED ****  
READY TO ARM
```

Part or all of the above message can be modified to create a custom installer message for each partition. For example, **** DISARMED **** on the first line or READY TO ARM on the second line could be replaced by the installation company name or phone number for service. Note that there are only 16 character spaces on each of the two lines. To create a custom display message, proceed as follows:

1. Select DEFAULT SCREEN mode. The keypad will ask for the partition number for this message. Enter the partition number. Press [*] to accept entry.

The following will appear:

```
**** DISARMED ****  
READY TO ARM
```

A cursor will be present at the extreme left of the first line (over the first "star"). The [6] key is used to move the cursor to the right and the [4] key to move the cursor to the left. Key [7] may be used to insert spaces or erase existing characters.

2. For example, to replace the READY TO ARM words with the message: SERVICE:424-0177, proceed as follows:

Press the [6] key to move the cursor to the right, and continue until the cursor is positioned over the first location on the second line.

Press the [3] key to advance through the alphabet to the first desired character (in this case, "S"). Use the [1] key to go backward, when necessary. When the desired character is reached, press [6]. The cursor will then move to the next position, ready for entry of the next character (in this example, "E"). When the cursor reaches a position over an existing character, pressing the [3] or [1] key will advance or back up from that character in the alphabet. Proceed in this manner until all characters in the message have been entered.

3. To store this new display message in memory, press the [8] key.
4. The system will ask for a new partition number. Enter 00 to quit or 1-2 for a new partition number.

ALPHA VOCABULARY

(For Entering Alpha Descriptors. To select a word, press [#] followed by the word's 3-digit number.)

Bulleted words in **bold face type** are those that are also available for use by the 4285 phone module. If using a phone module, and words other than these are selected for alpha descriptors, the phone module will not provide annunciation of those words.

NOTE: This vocabulary is not to be used for relay voice descriptors.

See the vocabulary listed in the RELAY VOICE DESCRIPTORS section when programming relay voice descriptors.

000 (Word Space)	051 DESK	• 101 INSIDE	151 POLICE	202 TRANSMITTER
• 001 AIR	• 052 DETECTOR	102 INTERIOR	152 POOL	203 TRAP
• 002 ALARM	• 053 DINING	103 INTRUSION	• 153 POWER	204 ULTRA
003 ALCOVE	054 DISCRIMINATOR	104 JEWELRY	154 QUAD	• 205 UP
004 ALLEY	055 DISPLAY	• 105 KITCHEN	155 RADIO	• 206 UPPER
005 AMBUSH	056 DOCK	• 106 LAUNDRY	• 156 REAR	• 207 UPSTAIRS
• 006 AREA	• 057 DOOR	• 107 LEFT	157 RECREATION	• 208 UTILITY
• 007 APARTMENT	058 DORMER	108 LEVEL	158 REFRIG	209 VALVE
008 ART	• 059 DOWN	• 109 LIBRARY	159 REFRIGERATION	210 VAULT
• 009 ATTIC	• 060 DOWNSTAIRS	• 110 LIGHT	160 RF	211 VIBRATION
010 AUDIO	061 DRAWER	• 111 LINE	• 161 RIGHT	212 VOLTAGE
011 AUXILIARY	• 062 DRIVEWAY	112 LIQUOR	• 162 ROOM	213 WALL
• 012 BABY	063 DRUG	• 113 LIVING	163 ROOF	214 WAREHOUSE
• 013 BACK	• 064 DUCT	• 114 LOADING	164 SAFE	215 WASH
• 014 BAR	• 065 EAST	115 LOCK	165 SCREEN	• 216 WEST
015 BARN	066 ELECTRIC	116 LOOP	166 SENSOR	• 217 WINDOW
• 016 BASEMENT	067 EMERGENCY	117 LOW	• 167 SERVICE	218 WINE
• 017 BATHROOM	068 ENTRY	• 118 LOWER	• 168 SHED	• 219 WING
• 018 BED	• 069 EQUIPMENT	• 119 MACHINE	169 SHOCK	220 WIRELESS
• 019 BEDROOM	070 EXECUTIVE	120 MAGNETIC	• 170 SHOP	221 WORK
020 BELL	• 071 EXIT	121 MAIDS	171 SHORT	222 XMITTER
• 021 BLOWER	072 EXTERIOR	122 MAIN	172 SHOW	223 YARD
• 022 BOILER	• 073 FACTORY	• 123 MASTER	• 173 SIDE	224 ZONE (No.)
023 BOTTOM	074 FAILURE	124 MAT	174 SKYLIGHT	• 225 ZONE
024 BOX	075 FAMILY	• 125 MEDICAL	175 SLIDING	226 0
025 BREAK	• 076 FATHERS	126 MEDICINE	• 176 SMOKE	227 1
• 026 BUILDING	• 077 FENCE	127 MICROWAVE	177 SONIC	228 1ST
027 BURNER	078 FILE	128 MONEY	• 178 SONS	229 2
028 CABINET	• 079 FIRE	129 MONITOR	• 179 SOUTH	230 2ND
• 029 CALL	• 080 FLOOR	• 130 MOTHERS	180 SPRINKLER	231 3
030 CAMERA	081 FLOW	• 131 MOTION	• 181 STAMP	232 3RD
031 CAR	082 FOIL	132 MOTOR	182 STATION	233 4
032 CASE	• 083 FOYER	133 MUD	183 STEREO	234 4TH
033 CASH	084 FREEZER	• 134 NORTH	• 184 STORE	235 5
034 CCTV	• 085 FRONT	135 NURSERY	• 185 STORAGE	236 5TH
035 CEILING	086 FUR	• 136 OFFICE	186 STORY	237 6
036 CELLAR	087 FURNACE	137 OIL	187 STRESS	238 6TH
• 037 CENTRAL	088 GALLERY	• 138 OPEN	188 STRIKE	239 7
038 CIRCUIT	• 089 GARAGE	139 OPENING	189 SUMP	240 7TH
039 CLIP	• 090 GAS	• 140 OUTSIDE	190 SUPERVISED	241 8
• 040 CLOSED	091 GATE	141 OVERFLOW	191 SUPERVISION	242 8TH
041 COIN	• 092 GLASS	142 OVERHEAD	192 SWIMMING	243 9
042 COLD	093 GUEST	143 PAINTING	193 SWITCH	244 9TH
043 COATROOM	094 GUN	• 144 PANIC	194 TAMPER	250 Custom Word 1
044 COLLECTION	• 095 HALL	145 PASSIVE	195 TAPE	to
045 COMBUSTION	• 096 HEAT	• 146 PATIO	196 TELCO	269 Custom Word 20
• 046 COMPUTER	097 HIGH	147 PERIMETER	197 TELEPHONE	
047 CONTACT	098 HOLDUP	• 148 PHONE	198 TELLER	
• 048 DAUGHTERS	099 HOUSE	149 PHOTO	• 199 TEMPERATURE	
049 DELAYED	100 INFRARED	150 POINT	200 THERMOSTAT	
• 050 DEN			• 201 TOOL	

*Note: This factory-provided vocabulary of words is subject to change.

CHARACTER (ASCII) CHART (For Adding Custom Words)

32 (space)	42 *	52 4	62 >	72 H	82 R
33 !	43 +	53 5	63 ?	73 I	83 S
34 "	44 ,	54 6	64 @	74 J	84 T
35 #	45 -	55 7	65 A	75 K	85 U
36 \$	46 .	56 8	66 B	76 L	86 V
37 %	47 /	57 9	67 C	77 M	87 W
38 &	48 0	58 :	68 D	78 N	88 X
39 '	49 1	59 ;	69 E	79 O	89 Y
40 (50 2	60 <	70 F	80 P	90 Z
41)	51 3	61 =	71 G	81 Q	

Device Programming

This menu is used to program keypads, receivers and relay modules. From Data Field Programming mode, press #93 to display "ZONE PROG?". Press 0 repeatedly to display "DEVICE PROG?".

DEVICE PROG?
1=YES 0=NO

Press **1** to enter DEVICE PROGRAMMING mode.

DEVICE ADDRESS
01-15, 00 = QUIT

Enter the 2-digit device number as set by the device's DIP switches (**01-15**). Press [*] to accept entry. Enter **00** to return to the main menu. See NOTE below.

DEVICE TYPE

Select the type of addressable device as follows:

- 00 = device not used
- 01 = alpha keypad (6139)
- 02 = fixed word keypad (6128, 6137)
- 03 = RF receiver (4281/5881)
- 04 = output device (4204 relay module)
- 05 = phone module (4285)
- 07 = VIM voice interface module (refer to VIM menu prompts on the following page if this device type is selected)
- 08 = 6139AV 2-way voice/alpha keypads

Press [*] to accept entry.

RF EXPANDER
HOUSE ID XX

If device type 03 (RF receiver) is selected, this prompt will appear. Enter the 2-digit house ID (00-31)

MODULE PARTITION?

If device type 05 (phone module) is selected, this prompt will appear. Enter the partition number 1-2 in which the phone module is located.

VOICE KEYPAD NO.
01-15

If device type 08 (2-way voice keypad) is selected, enter the voice keypad's number. The voice keypads should be numbered in order, starting from 01. For example, if it is the first voice keypad, enter 01; if it is the second, enter 02, etc. This number is used by the central station operator to locate and communicate with the premises in case of an emergency. 01-06 is recommended. Press [*] to accept entry.

CONSOLE PART.

If device type 01, 02 or 08 was selected this prompt will appear. Enter the addressable device's default partition number (01 to maximum number of partitions programmed for system in field 2*00). This is the primary partition for which the device is intended to be used. Press [*] to accept entry.

SOUND OPTION

If device type 01, 02 or 08 was selected this prompt will appear. Addressable keypads can be individually programmed to suppress arm/disarm beeps, entry/exit beeps and chime mode beeps. This helps prevent unwanted sounds from disturbing users in other areas of the premises.

Enter a number 00-03 for the keypad sounding suppression options desired for the keypad as follows:

- 00 = no suppression.
- 01 = suppress arm/disarm & entry/exit beeps.
- 02 = suppress chime mode beeps only.
- 03 = suppress arm/disarm, entry/exit **and** chime mode beeps.

The screen will display the next device number to be programmed. Press **00** to exit Menu Mode.

NOTE: Keypad address 00 will always be set to an alpha keypad with no sounder suppression options.

VIM Voice Interface
Module Prompts

NOTE: The VIM reports supervisory faults as zone 93. Make sure to program a response type (trouble = response type 05) and report code to zone 93 using #93 Menu Mode - ZONE PROGRAMMING.

If device type 7 (VIM) is selected, the following prompts will appear.

VIM PARTITION?

Enter the partition number as follows:

- 0 = Automatic Mode, which means that 2-way voice activates only in the partition in which the alarm occurred. (maximum of six 6139AV keypads per system)
- 1 = Partition 1 Only, which means 2-way voice activates in partition 1 only and only upon alarms occurring in partition 1. (maximum of six 6139AV keypads per partition)
- 2 = Partition 2 Only, which means 2-way voice activates in partition 2 only and only upon alarms occurring in partition 2. (maximum of six 6139AV keypads per partition)
- 3 = All Mode, which means 2-way voice activates in all partitions upon alarms in any partition. In this mode, a maximum of six 6139AV keypads can be used in the system and there can be no duplicate Voice keypad numbers between the partitions.

Press [*] to accept entry.

MAX 2WAY T.O.

At the end of this timeout, the system automatically ends a 2-way voice session. Enter the maximum 2-way voice session timeout as follows:

- 0 = 5 minutes (default)
- 1 = 10 minutes
- 2 = 15 minutes (typical)
- 3 = no timeout (used when testing the system)

Press [*] to accept entry.

CHIME OTHERS

This prompt allows chime and alarm sounds to be turned on or off in partitions other than the one in which a 2-way voice session is active as follows:

- 0 = Off, do not sound chimes or alarms in other partitions during a 2-way voice session
- 1 = On, do allow chimes and alarm sounds to occur in other partitions during a 2-way voice session, except if VIM Partition is set to "3" ALL mode.

Press [*] to accept entry.

VIM TEXT?

If enabled, this option displays the VIM mode status at the keypad (e.g., LISTEN MODE), which can be helpful when testing the system. Enter **1** to select. Enter **0** if not desired. Press [*] to accept entry. NOTE: Panic zones (95, 96 and 99) will not display 2-way voice mode messages regardless of whether VIM TEXT is enabled.

VIM AC LOSS

This option, if selected, allows the VIM to "listen-in" in the event of the system's AC loss (it then operates using the backup battery power). This is recommended for installations where life support devices are used, such as a dialysis machine. Enter **1** to select. Enter **0** if operation upon power failure is not desired. Press [*] to accept entry.

AUTO CALL BACK

If enabled, this option allows the Central Station to call back and initiate 2-way voice communication within 5 minutes after an alarm report is sent. Otherwise, a "Listen in to Follow" message (Contact ID event code "606") is sent at the end of the report to initiate 2-way voice communication *immediately*.

This is recommended if dual reporting is selected, to allow the report to be sent to primary and secondary numbers.

The display returns to the DEVICE ADDRESS prompt for entry of the next device or exit from DEVICE PROGRAMMING mode.

Relay Programming

These relay output actions are performed in response to a programmed condition.

The VISTA-40 supports up to eight (8) X-10 and/or relay outputs. The X-10 interface is made via a 4300 plug-in transformer. Relay and X-10 devices are interchangeable in functionality. Once a device is programmed into the system, there is no distinction between an X-10 or a relay output device.

Relays can be used to perform many different function and actions. Each relay must be programmed to begin one of four types of ACTIONS at a designated START event and end that ACTION at a designated STOP event.

Action (A)

The "ACTION" of a relay is the way in which the relay will respond when activated by the "START" event. There are 4 different choices of actions:

- 1) **CLOSE for 2 Seconds....**The relay will activate for 2 seconds then reset. Because the relay resets on its own, "STOP" programming is not necessary
- 2) **CLOSE....**The relay will activate and remain activated until it is told to deactivate by the "STOP" programming.
- 3) **PULSE ON and OFF....**The relay will pulse (intermittent activation) until it is told to deactivate by the "STOP" programming.
- 4) **No Response....**Relay is not used.

START

The "START" programming determines when and under what conditions the relay will activate. There are 3 parts that must be programmed; Event, Zone List, and Zone type/System Operation. Each part is described below.

- 1) **EVENT (EV)....**The "EVENT" instructs the relay what condition must occur to the zone(s) programmed into the "ZONE LIST" in order to activate the relay. The "EVENT" and "ZONE LIST" work together. There are 5 different choices of events:
 - ALARM....An alarm condition occurring on any zone in the zone list will activate the relay.
 - FAULT....A fault condition (whether control is armed or disarmed) on any zone in the zone list will activate the relay.
 - TROUBLE....A trouble condition occurring on any zone in the zone list will activate the relay. (***A trouble condition can only occur on fire and day/night zones.***)
 - NOT USED....Use when an "EVENT" is not needed. If a "ZONE LIST" is not being used because a "ZONE TYPE/SYSTEM OPERATION" is, it is not necessary to use an "EVENT" or a "ZONE LIST".
- 2) **ZONE LIST (ZL)....**A "ZONE LIST" is a list of zones selected by the installer via menu selection after relay programming is completed. When an event occurs as assigned by "EVENT" on any zone within that list, the relay will activate as selected in "ACTION". In this way many zones can be assigned to a single event very easily. For example: you may wish a relay to activate (perhaps to activate a strobe to get a visual indication) whenever one zone of a group of zones is faulted.
- 3) **ZONE TYPE/SYSTEM OPERATION (ZT)....**Instead of using a "ZONE LIST" and "EVENT", a specific zone response type or action can be selected to activate the relay. If a specific zone response type is chosen, any zone of that type going into alarm, trouble, or fault will cause the relay to activate as selected in "ACTION". Any zone of that type that restores will deactivate the relay. If a "SYSTEM OPERATION" is chosen, that operation will cause the relay to activate as selected in "ACTION".

The following is a list of choices for (ZT):

CHOICES FOR ZONE

TYPES:

- 00 = No Response (Not Used)
- 01 = Entry/Exit #1
- 02 = Entry/exit #2
- 03 = Perimeter
- 04 = Interior Follower
- 05 = Trouble Day/Alarm Night
- 06 = 24 Hr Silent
- 07 = 24 Hr Audible
- 08 = 24 Hr Aux
- 09 = Fire Alarm or Trouble
- 10 = Interior w/Delay
- 23 = No alarm response

CHOICES FOR SYSTEM OPERATION:

- 20 = Arming-Stay (5800 RF)
- 21 = Arming-Away (5800 RF)
- 22 = Disarming (Code+Off) (5800 RF)
- 31 = End of Exit Time
- 32 = Start of Entry Time
- 33 = Any Burglary Alarm
- 34 = Code + # + 71 Key Entry
- 35 = Code + # + 72 Key Entry
- 36 = At Bell Timeout **
- 37 = 2 Times Bell Timeout**
- 38 = Chime
- 39 = Any Fire Alarm
- 40 = Bypassing
- 41 = AC Power Fail
- 42 = System Battery Low
- 43 = Communication failure
- 44 = RF low battery
- 45 = Polling loop failure
- 47 = Keypad failure
- 51 = RF receiver failure
- 52 = kissoff
- 54 = fire zone reset
- 55 = disarm + 1 minute
- 56 = XX minutes (enter XX in field 1*74; stop condition only)
- 57 = YY seconds (enter YY in field 1*75; stop condition only)
- 58 = Duress
- 60 = Select only if a non-Ademco AAV unit is being used; also select for Start and Stop if a 4204 relay module is being used.
- 64 = VIM Fail
- 65 = VIM Active
- 66 = VIM Inactive

** Or at Disarming, whichever occurs earlier

STOP

The "STOP" programming determines when and under what conditions the relay will deactivate. The following items can be programmed: Restore Zone List, Zone type/System Operation, and Partition.

- 1) **RESTORE ZONE LIST (ZL)**....If a "RESTORE ZONE LIST" is used, the relay action will deactivate when all the zones in that list restore from a previous fault or alarm condition. This will occur regardless of what is programmed to start the relay, therefore, a "RESTORE ZONE LIST" would normally only be used when a "ZONE LIST" is used to start the relay.
- 2) **ZONE TYPE/SYSTEM OPERATION (ZT)**....Instead of using a "RESTORE ZONE LIST" , a specific zone response type or action can be selected to deactivate the relay. If a specific zone response type is chosen, any zone of that type that restores from a previous alarm, trouble, or fault condition will cause the relay to deactivate. If a "SYSTEM OPERATION" is chosen, that operation will cause the relay to deactivate.

Relay Programming Menus

From #93 Menu Mode, select Relay Programming Menu.

Press [*] to advance to next screen. Press # to backup to previous screen.

ENTER RELAY NO. (00=QUIT) 01

Enter the relay (output device) identification number **1-8**. This is a reference number only, for identification purposes. The actual module address and relay number on the module are programmed in the last two prompts.

NOTE: 4204 Relay Module must be rev. "V3" or higher to activate temporal pulsing.

02 A EV ZL ZT P
STT 0 0 0 00

The keypad will display a summary START screen.

02 A EV ZL ZT P
STOP 0 0 0 00

The keypad displays a summary STOP screen.

02 RELAY ACTION
NO RESPONSE

Enter the desired relay action as follows:
0=not used; **1**=closed for 2 secs.; **2**=stay closed; **3**=pulse on/off (temporal pulse).

Note: The 4204 relay must have "V3" later installed to activate temporal pulse.

02 START EVENT
NOT USED

Enter the event code to start the relay action as follows: **0**=not used; **1**=alarm; **2**=fault; **3**=trouble; **4**=restore

02 START: ZN LIST
NO LIST

If a zone list is being used to start this relay action, enter the zone list number **1-4**. If a zone list is not being used, enter **0**.

02 START: ZN TYPE

If a zone type/system operation is being used to start the relay action, enter the 2-digit Zone Type/System Operation number from the list shown earlier in the RELAY PROGRAMMING section.

02 START PART

Enter **0** for any partition. Enter **1-2** for specific partition number.

02 STOP: ZN LIST
NO LIST

If a zone list is being used to stop this relay action, enter the zone list number **1-4**. If a zone list is not being used, enter **0**.

02 STOP: ZN TYPE

If a zone type/system operation is being used to stop the relay action, enter the 2-digit Zone Type/System Operation number from the list shown earlier in the RELAY PROGRAMMING section.

02 STOP PART

Enter **0** for any partition. Enter **1-2** for specific partition number.

RESTRICTION
1=YES 0=NO

The system may have some devices which are not intended to be under end user control, such as relays activating fire doors or machinery. Enter **1** if the end user will be restricted from accessing this relay group.

RELAY TYPE

Enter **1** for relays. Enter **2** for X-10 devices.

HOUSE CODE

For X-10 devices, enter the letter house code. A=0, B=1, C=2, etc. (00-15)

UNIT CODE

For X-10 devices, enter the numerical unit code (01-15)

ECP ADDRESS

For relay module (4204) outputs, enter the actual relay module's address set by its DIP switch (**01-15**). Up to 2 modules can be installed in a system.

MODULE RELAY #

For relay module (4204) outputs, enter the specific relay number on that module (**1-4**). The keypad displays the two summary screens again.

Zone List Programming

After entering all relay menu items, up to four (4) zone lists can be entered by entering 00 at the **ENTER RELAY No.** prompt.

Enter Zone LIST
00=QUIT 00

Enter the zone list number **1-4**.

01 Enter Zn Num.
00=QUIT 00

Enter each zone to be included in this zone list, pressing [*] to enter each zone number.

01 Del Zn LIST?

Enter **0** to save the zone list entered. Enter **1** to delete that zone list.

01 Delete Zone?
0=NO 1=YES

Enter **1** to delete one or more zones in that zone list. Enter **0** if no changes are necessary. If 1 is entered, the following screen will appear, otherwise the zone list no. prompt will reappear.

01 Zn to Delete?
00=QUIT 00

Enter each zone number to be deleted from the zone list, pressing [*] after each number.

View Zn LIST
00=QUIT 00

This will appear if **00** is pressed at the ENTER ZONE LIST prompt. Enter the zone list number that you wish to view.

XX ASSIGNED ZONE
00=QUIT 00

Press [*] to scroll through all zones in that list. Enter **00** to quit.

Programming Relays for Silencing of External Sounders When Using the VIM

The system can be programmed to silence external sounders during a 2-way voice session (VIM active) by using two relays connected in series. An example shows relays 1 and 2 of the Relay Module connected as shown in the diagram below. Program the relay that controls the bell/siren (#1) as usual and the other relay (#2) as shown below. This programming enables the sounders when the VIM is not active and disables the sounders when the VIM is active.

Ex. Relay #2 programming:

02 RELAY ACTION
STAY CLOSED 2

Enter the relay action as **2** (stay closed).

02 START EVENT
ALARM 1

Enter start and stop events as **1** (alarm).

02 START: ZN LIST
NOT USED 0

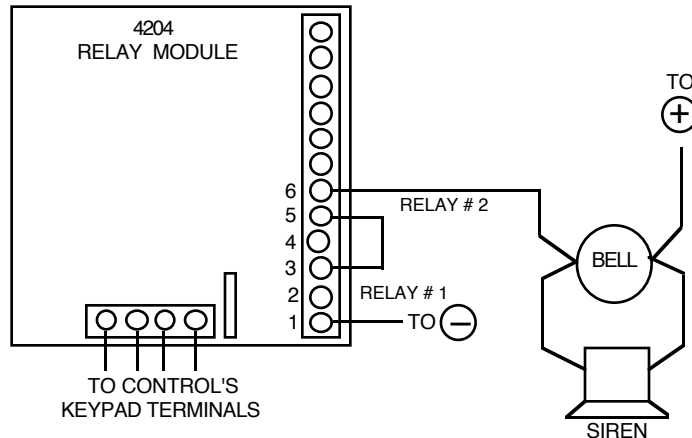
Enter **0** (not used) for start and stop zone list.

02 START: ZN TYPE
VIM ACTIVE 65

Enter start zone type **65** (VIM Active).

02 STOP: ZN TYPE
VIM INACTIVE 66

Enter stop zone type **66** (VIM Inactive).



Programming The Vim For
Relay Triggering On
Supervision Fault

To program the system to trigger a relay upon an VIM fault, use the Relay Programming Menu (as described earlier) but enter the following values at the appropriate prompts. When programmed, the relay activates upon VIM failure and deactivates when the operation of the VIM is restored.

02 START EVENT
TROUBLE 3

Enter **3** (trouble) as the event code to start the relay action.

02 START: ZN TYPE

Enter the start zone type code **64** (VIM Fail).

Program the other Relay Programming prompts as you normally would.

Relay Voice Descriptors

For each of the 8 relays/X-10 modules used in the system, a voice descriptor can be programmed. This descriptor will be annunciated by the phone module when performing the #70 relay commands via telephone.

Each voice descriptor can consist of up to 3 words selected from the relay voice descriptor vocabulary list shown below. **Important:** The index numbers from this vocabulary list are to be used for relay voice descriptors only. For normal system voice annunciation (e.g., alarms, troubles, status), use the highlighted words in the alpha vocabulary list found in the alpha programming section.

RLY VOICE DESCR?
0=NO 1=YES

Press **1** to program voice descriptors for relays.

ENTER RELAY NO.
00=QUIT 01

Enter the 2-digit relay/X-10 module number (**01-08**) for the relay desired, or enter **00** to quit relay voice descriptor programming mode. Press [*] to accept entry.

01 ENTER DESC d1

From the relay voice descriptor vocabulary list, enter the 3-digit index number for the first word of the relay descriptor phrase. Press [*] to accept entry.

01 ENTER DESC d2

From the relay voice descriptor vocabulary list, enter the 3-digit index number for the second word of the relay descriptor phrase. If second word is not desired, press 000. Press [*] to accept entry.

01 ENTER DESC d3

From the relay voice descriptor vocabulary list, enter the 3-digit index number for the third word of the relay descriptor phrase. If third word is not desired, press 000. Press [*] to accept entry.

The ENTER RELAY NO. prompt will appear. Enter the next relay number to be programmed, or enter **00** to quit.

Relay Voice Descriptors and Custom Word Substitutes Vocabulary

Word	Index	Word	Index	Word	Index	Word	Index	Word	Index
Air.....	116	Daughter's	208	Garage.....	023	Off.....	011	South	155
Alarm	255	Den	052	Gas.....	138	Office.....	147	Stairs	006
And	067	Detector.....	128	Glass.....	139	On.....	058	Station.....	156
Apartment.....	117	Device	060	Hall	050	One.....	070	Storage.....	157
Appliances.....	161	Dim.....	163	Heat.....	010	Open.....	148	Sun	154
Area.....	118	Dining.....	031	Inside.....	209	Outside.....	210	System	062
Attic.....	119	Door	016	Kitchen.....	022	Panic	013	Temperature	158
Baby.....	120	Down.....	008	Laundry	140	Partition	090	Third.....	159
Back	121	Downstairs	184	Left.....	027	Patio.....	149	Three.....	072
Bar.....	122	Driveway	130	Library.....	141	Phone	061	Tool.....	213
Basement	021	Duct.....	131	Light.....	019	Power.....	063	Two	071
Bathroom.....	051	East.....	132	Living.....	030	Pump.....	166	Up	025
Battery	053	Eight.....	077	Loading	142	Rear	088	Upper	187
Bed	092	Eighth.....	221	Lower	094	Right.....	028	Upstairs.....	183
Bedroom.....	015	Equipment.....	133	Machine	143	Room.....	018	Utility.....	185
Blower	123	Exit.....	004	Master.....	144	's	007	West.....	215
Boiler	124	Factory.....	134	Medical	014	Second.....	056	Window.....	017
Bright.....	162	Father's.....	211	Mother's.....	212	Service	150	Wing.....	216
Building	125	Fence.....	135	Motion	145	Seven.....	076	Zero.....	069
Burglary	039	Fifth.....	218	Nine.....	078	Seventh.....	220	Zone.....	002
Call	009	Fire.....	040	Ninth.....	222	Shed	151		
Central.....	089	First	136	No	165	Shop	152		
Chime.....	054	Five	074	North	146	Side.....	153		
Closed.....	126	Floor.....	029	Not.....	012	Six.....	075		
Computer.....	127	Four.....	073			Sixth.....	219		
Console.....	066	Fourth.....	217			Smoke.....	024		
		Foyer.....	137			Son's.....	223		
		Front.....	087						

Custom Word Voice Substitutes

For each of the 20 custom alpha display words that can be programmed, a substitute phone module word can be assigned. This substitute word will be announced by the phone module in place of the custom word that is displayed on the alpha keypad. For example, an alarm display for "John's bedroom" could be annunciated, "son's bedroom," since there is no annunciation for the custom word "John." If a substitute word is not assigned, the phone module will be silent for that part of the announcement for which a custom alpha word exists.

CUSTOM INDEX #? 0=NO 1=YES
--

If substitute words for the phone module are desired, enter **1** at this prompt.

CUSTOM WORD NO. 00=QUIT

Enter the custom word number (**01--20**) for which a voice substitute is desired. Enter **00** to quit this programming mode. Press [*] to accept entry.

01 ENTER INDEX #

Enter the 3-digit substitute word index number from the relay voice descriptor and custom word substitutes vocabulary list found in the Relay Voice Descriptors section. Press [*] to accept entry. The "CUSTOM WORD NO." prompt appears. Enter the next custom word number or enter **00** to quit.

Section 5. SYSTEM COMMUNICATION

COMMUNICATION FORMATS

Split/Dual Reporting Dual reporting (*51) sends **all** reports to both primary and secondary phone numbers. Split reporting allows reports to be divided between the phone numbers according to the field's (1*34) selections. Split/Dual reporting can be selected by enabling dual reporting **and** enabling one of the split reporting options in field 1*34. If option [1] is selected, all alarms, alarm restores and cancel reports will go to both phone numbers, while all other reports will go to the secondary phone number. If [2] is selected, open/close and test messages will go to both phone numbers, while all other reports will go to the primary phone number. Following are the Split/Dual Reporting options:

Reporting Format	Field Number		Phone #	Reports
	*51	1*34		
Dual	1	0	-----	All reports to both numbers
Split	0	1	Primary Secondary	alarms, restores, cancel open/close, test [†] , troubles
	0	2	Primary Secondary	alarms, restores, troubles open/close, test [†]
Split/Dual	1	1	Primary Secondary	alarm, restores & cancel alarms, restores, troubles, open/close, test [†]
	1	2	Primary Secondary	alarms, restores, troubles alarms, restores, open/close, test [†]

[†] **NOTE:** 2-way audio test (code + #65) always routes to the primary phone number regardless of the programming of fields *51 and 1*34.

If in DUAL/SPLIT reporting mode and 2-way AUTO CALLBACK is disabled, the report will not go to the secondary phone number until the 2-way session has ended. To allow the secondary phone to receive reports immediately after the primary phone, enable AUTO CALLBACK mode in VIM programming. This will prevent the sending of the "listen in to follow" message (606), allowing the report to go to the secondary phone number. 2-way voice can then be initiated by calling back within 5 minutes and entering the correct audio ID number.

Ademco Low Speed ADEMCO LOW SPEED is a pulsed format which responds to a 1400 Hz handshake and kiss-off, and transmits data with 1900Hz pulse tones @ 10 pulses per second (pps). A typical message consists of two rounds which must be verified by the receiver. A complete standard report consists of either a 3 or 4-digit account number followed by a 1-digit alarm code. Though 2 rounds are sent, only the valid report is displayed.

In expanded reporting, two messages are sent, two rounds per message, the first being the account number and alarm code, the second being the zone ID code to which the alarm was assigned. A complete expanded report consists of a 3 or 4-digit account number followed by a 1-digit alarm code, then the alarm code is repeated, followed by the channel number.

EX. Standard: CCC(C) E where: CCC(C) = account number
E = event code

Expanded: CCC(C) E Z = zone ID code
EEE(E) Z

Sescoa/Radionics Standard and expanded reporting in the SESCOA/RADIONICS format is virtually the same as ADEMCO Low Speed except for the following:

1. The handshake and kiss-off frequency is 2300 Hz.
2. The data is transmitted with 1800 Hz pulse tones.
3. The rate of transmission is 20 pps.

4+2 Reporting A 4+2 report consists of a 4-digit account number and a 2-digit alarm code, or event code. 4+2 reports can be accomplished either in ADEMCO Low Speed (10 pps), or SESCOA/RADIONICS (20 pps) format.

In 4+2 reporting a unique 2-digit code for each zone is reported. A 4-digit account number followed by a 2-digit code is sent, where the first digit is the actual event, such as in ALARM, RESTORE, or TROUBLE, etc., and the second digit of the code represents the "zone" where the event occurred. (but not necessarily the actual zone number). Each code in itself is unique to a specific zone. If desired, the actual zone number can be reported by entering the corresponding 2-digit zone number (ex. zone 1= [0] [1]; zone 63= [6] [3]). A report might appear as:

1 2 3 4 5 9 ("5 9" might be a unique "TROUBLE RESTORE, ZONE 25).

4+2 Express ADEMCO's Express format provides the same information as the 4+2 format, but with three differences:

1. The data is transmitted in DTMF (Dual Tone Multi-Frequency, known as "TouchTone", at the rate of 10 characters per second). This greatly decreases the time it takes a report to go through to central station. An average 4+2 Low Speed report might take as long as 20 seconds to complete its report, but 4+2 Express takes under 3 seconds.
2. Two message rounds are eliminated by the use of a checksum digit. Instead of the communicator sending 2 rounds per report, it sends only 1 round with a checksum digit at the end. Doing this also helps in decreasing the time it takes for a report to be sent.
3. The handshake frequency is 1400 Hz followed by 2300 Hz, and the kiss-off frequency is 1400 Hz.

Ademco High Speed Reporting ADEMCO's High Speed format transmits data in DTMF at a rate of 10 characters per second. The handshake frequency is 1400 Hz followed by 2300 Hz, and the kiss-off frequency is 1400 Hz. The message contains 13 digits as follows: A 4-digit account number + eight channels of zone information (1-8 or duress plus 9-15) + one status channel, which identifies the type of events being reported in the eight zone locations. A typical High Speed report will be kissed off in under 5 seconds.

Channels 1 through 8 could have one of the following conditions:

- 1 = NEW EVENT
- 2 = OPENING (Status Channel Always = 2)*
- 3 = RESTORE
- 4 = CLOSING (Status Channel Always = 4)*
- 5 = NORMAL, NO EVENT TO REPORT
- 6 = PREVIOUSLY REPORTED, NOT YET RESTORED

* NOTE: Channel 1 will contain the user ID 1-9, A-F if Open/Close reporting is enabled.

The status channel might have one of the following conditions:

- 1 = DURESS (For Duress Plus Channels 9-15 Only)
- 2 = OPENING
- 3 = BYPASS (For Channels 1-8 Only)
- 4 = CLOSING
- 5 = TROUBLE (For Channels 1-8 Only)
- 6 = SYSTEM STATUS:
 - AC LOSS in Channel 1
 - LOW BATTERY in Channel 2
 - PROGRAM TAMPER in Channel 3
 - POWER ON RESET in Channel 4
- 7 = NORMAL ALARM STATUS (Chnls 1-8 Only)
- 9 = TEST REPORT

A typical high speed report may look as follows:

1234 5115 5555 7 (Acct #1234 with alarms on channels 2 and 3)

High Speed Format Limitations

1. When using Ademco high speed, remember there are only 15 channels available, plus a duress channel. If more than 15 zones are being used, they will have to share channels.
2. With Ademco High Speed reporting, channels 9-15 cannot report troubles or bypasses. Use these channels for zones that will not report these conditions.

Contact ID Reporting This is the only format that can identify all 64 protection zones by their unique zone (Contact) ID numbers, and provides a 1-digit event qualifier and 3-digit, specifically defined event code which quickly identifies the condition being reported.

Contact ID reports in DTMF (Dual Tone Multi-Frequency @ 10 characters per second) and responds to a 1400 Hz followed by 2300 Hz handshake, and a 1400 Hz kiss-off. This format also uses checksum instead of two message verification. A complete report takes under 3 seconds.

Contact ID Reporting takes the format: CCCC Q EEE GG ZZZ

where:

CCCC = Customer (subscriber) number.

Q = Event qualifier, where: E=new event (1) and R= restore (3)

EEE = Event code (3 hexadecimal digits), defined in the table below.

GG = Partition number.

ZZZ = Zone/contact ID number reporting the alarm (001-099), or user number (001-099) for open/close reports. System status messages (AC Loss, Walk Test, etc.) contain zeroes in the ZZZ location.

TABLE OF CONTACT ID EVENT CODES

Code	Definition
110	Fire Alarm
121	Duress
122	Silent Panic
123	Audible Panic
131	Perimeter Burglary
132	Interior Burglary
133	24 Hour Burglary (zone type 11 if supported)
134	Entry/Exit Burglary
135	Day/Night Burglary
150	24 Hour Auxiliary
301	AC Loss
302	Low System Battery
305	System Reset
306	Program Tamper
309	Battery Test Fail
332	Poll Loop Short-Trouble
333	Addressable Device Failure
373	Fire Loop Trouble
380	Trouble (global)

Code	Definition
381	Loss of Supervision - RF
382	Loss of RPM Supervision
383	RPM Sensor Tamper
384	RF Transmitter Low Battery
401	O/C By User
403	Power-Up Armed
406	Cancel by User
407	Remote Arm/Disarm (Download)
408	Quick Arm
409	Keyswitch O/C
411	Call back Requested
441	Armed STAY
570	Bypass
602	Periodic Test
606	Audio Alarm Verification to follow (AAV-listen-in)
607	Walk Test Mode, 2-Way Audio Test
621	Event Log Reset
625	Time/Date Reset
626	Time/date inaccurate

ADVISORY:

Ademco's new Contact ID reporting is capable of uniquely reporting all 64 zones of information, as well as openings and closings for all 70 users, to central stations equipped with the Ademco 685 receiver using software level 4.4 or higher. Must be level 4.6 to fully support all new VISTA-40 report codes. 685 software levels below 4.4 cannot support Contact ID reporting. For information regarding updating the 685 receiver, contact the Technical Support group (see *CONTACTING TECHNICAL SUPPORT* section toward the end of this manual).

NOTE: Contact ID event code "606" is sent only if a VIM, and at least one 2-way voice keypad is used, and the AUTO CALLBACK option is disabled. If AUTO CALLBACK option is enabled, then the restriction that the 685 Rev number must be 4.6 or higher no longer applies, and the 2-way voice feature will work with ANY central station receiver.

COMMUNICATION PROGRAMMING

General Information To help expedite the installation, the system provides 4 different communication defaults (Low Speed, Ademco Express, Ademco High Speed & Ademco's new Contact ID). These defaults automatically program industry-standard code assignments for zones, keypad panics, non-alarm and supervisory conditions, and can be loaded at any time without affecting non-communication program fields.

Loading Communication Defaults To load a communication default set, do the following:
While in programming mode, first change to the 1*xx set of fields (press *94), then enter one of the following field numbers to load the communication default set desired.

NOTE: Default communication commands are in second set of programming fields (fields 1*80, 1*81, 1*82 & 1*83).

TABLE OF DEFAULT PROGRAMMING COMMANDS

PRESS	TO LOAD THIS DEFAULT PROGRAMMING SET
*80	Low Speed communication defaults
*81	Ademco Express communication defaults
*82	Ademco High Speed communication defaults
*83	Contact ID communication defaults

These defaults load industry standard codes that will suit most of your needs. Program fields *54-*82 make up the communications portion of the programming, and can be changed as needed to suit special applications. A complete list of these default values is provided at the end of this section.

Making Changes To Communication Fields If programming communication fields manually to change default values, simply enter whatever code (3+1, 4+1, 4+2 or Ademco Express) is to be sent for each zone (including panics, non-alarm codes and supervisory codes). NOTE: Enter "10" to transmit an "A", which appears as "0" at the receiver.

Report code entries for all zones are grouped into 8 zones per pair of program fields, with common restore, trouble and bypass codes for every 2 groups (16 zones). Refer to the programming form for clarification.

For 3+1, 4+1, 4+2 and Ademco Express, the first entry is the alarm code and swinger suppression channel for a standard report. The second entry is the ID digit for an expanded 3+1 or 4+1 report, or for a 4+2 or Ademco Express report. If the second digit is 0, only 3+1 or 4+1 (or 4+1 express) non-expanded messages will be sent.

For Ademco High Speed format, the first digit entry is the channel assignment for that zone, and the second digit is ignored, if entered. For Contact ID reporting, the first digit entry (any non zero entry) enables reporting for that zone and assigns the swinger suppression channel, and the second digit is ignored.

NOTE: Restoral reports for an event **will not** be sent if the event itself is not enabled, even if a restore code is programmed for that event.

Swinger Suppression This feature limits the number of alarm and trouble messages sent on a given channel during an armed period. Each channel has a separate counter for each message type (alarm, alarm restore, trouble, trouble restore). When the programmed swinger suppression value has been exceeded for a particular message, further messages of that type sent on that channel will be inhibited. This feature is intended to reduce "swinger" alarms/troubles from clogging the central station. To disable swinger suppression, enter 00 in field *84 (must be 00 for UL installations), which allows all alarm and trouble messages to be reported.

Enabling Of Dialer Reporting By Partition In order to enable dialer reports for a partition, an account number (fields *32 & *90) must be programmed for that partition. The Control is shipped with an account number set for partition 1 only (set to FFFF). Partition 2 has no account numbers pre-programmed.

In addition, in case of phone line failure, the "COMM. FAIL" message will not be displayed in partitions which do not have a primary account number programmed.

COMMUNICATION PROGRAMMING GUIDE

Field #	Low Speed	Contact ID	High Speed	Express
*46, *48	Choose transmission speed and frequency	No effect	No effect	No effect
*52, *53	Send as either 4+2 or expanded	No effect	No effect	No effect
*79, *80	Enables alarm restores	Enables alarm restores	Enables alarm restores	Enables alarm restores
*49	Add checksum digit	No effect	Add checksum digit	No effect
*81, *82	Define codes and selects 4+1 or 4+2	1st digit enables report if it is non-zero	1st digit enables report if it is non-zero	Define codes and selects 4+1 or 4+2
*54, *56, *59, *61, *64, *66, *69, *71, *74, *76	Defines alarm event code	Enables reports	Assigns reporting channel for all reports from this zone. Enables alarm reporting.	Defines alarm event code
*55, *57, *60, *62, *65, *67, *70, *72, *75, *77	Defines code and selects 4+1 or 4+2	No effect	No effect	Defines code and selects 4+1 or 4+2
*58, *63, *68, *73, *78 event	Enables report and selects code. Note: No restores if event not sent.	Enables report	Enables report Note: Alarm channel must be programmed. (01-15)	Enables report and selects 1st digit of the 2-digit code. NOTE: No restores if event not sent.
*50	Sescoa/Radionics; Selects fixed digit time instead of fixed interdigit.	No effect	No effect	No effect
NOTES	Note: Low Speed will not send 3+2 messages. Zone ID digit is suppressed.			

Summary Of Default Consequences

Loading communication defaults results in the following:

Low Speed (*94*80)

- Selects low speed, standard format with no checksum, for both phone numbers.
- Assigns the following report codes:
 - 03 for zones 2-47
 - 01 for zones 1 & 48-55 (fire zones)
 - 02 for zones 62,63 (panic transmitter), & 95, 96, 99 (keypad panics)
 - 09 for all alarm restores
- Enables all zone type alarm restores.
- Disables reporting Troubles, Trouble Restores, Bypass, Bypass Restores for all zones.

ADEMCO Express (*94*81)

- Selects Ademco express reporting format, with checksum, for both phone numbers.
- Report codes for zones 1-64, RF receivers and keypad panics are sent as their respective zone ID numbers (01-64, 87-91, 95-99), Duress is sent as "DD". Alarm restore is "E" + 2nd digit.
- Enables all zone type alarm restores.
- Disables reporting Troubles, Trouble Restores, Bypass, Bypass Restores for all zones.

ADEMCO High Speed (*94*82)

- Selects Ademco High Speed format, with no checksum, for both phone numbers.
- Reporting is assigned to the following channels:
 - Channel 1 for zones 1 & 48-55 (Fire zones)
 - Channel 2 for zones 2-8
 - Channel 3 for zones 9-16
 - Channel 4 for zones 17-31
 - Channel 5 for zones 32-47 (RF interior zones)
 - Channel 6 for zones 56-61
 - Channel 9 for zones 62 & 63 (panic transmitter)
 - Channel 7 for zone 87 and for 2nd receiver (88 & 89) & polling loop short (97)
 - Channel 8 for first receiver (90 & 91)
 - Channels 10, 11 & 12 for keypad panics 95, 96 & 99 respectively
- Enables all zone type alarm restores.
- Enables Duress to be sent.
- Disables reporting Troubles, Trouble Restores, Bypass, Bypass Restores for all zones.

ADEMCO's Contact ID (*94*83)

- Selects Contact ID format for both phone numbers.
- Reporting is enabled for all zones.
- Enables all zone type alarm restores.
- Refer to the SYSTEM COMMUNICATION section for event code definitions.

- Disables reporting Troubles, Trouble Restores, Bypass, Bypass Restores for all zones.

COMMUNICATION DEFAULTS for LOW SPEED FORMAT (*94 then *80)

- | | | | | | | | | | | |
|--------------------------------|--------------------------------|--------------------------------|--|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|----------|
| *45 PRIMARY FORMAT | <input type="text" value="0"/> | Ademco Low Speed | *51 DUAL REPORTING | <input type="text" value="0"/> | no | | | | | |
| *46 LOW SPEED FORMAT (Primary) | <input type="text" value="0"/> | Ademco Low Speed | *52 STANDARD/EXPANDED REPORT FOR PRIMARY | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | standard |
| *47 SECONDARY FORMAT | <input type="text" value="0"/> | Ademco Low Speed | Alarm | Rstr | Bypass | Trbl | Opn/Cls | Low Bat | | |
| *48 LOW SPEED FORMAT (Sec.) | <input type="text" value="0"/> | Ademco Low Speed | *53 STANDARD/EXPANDED REPORT FOR SECONDARY | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | standard |
| *49 CHECKSUM VERIFICATION | <input type="text" value="0"/> | <input type="text" value="0"/> | Alarm | Rstr | Bypass | Trbl | Opn/Cls | Low Bat | | |
| No checksum | | Primary | Secondary | | | | | | | |
| *50 SESCOA/RADIONICS SELECT | <input type="text" value="0"/> | Radionics | | | | | | | | |

ALARM REPORT CODE & ID DIGITS FOR ZONES 1-32 & SUPERVISORY & RESTORE CODES

*54 CODE	*55 ID	*56 CODE	*57 ID	*58	*59 CODE	*60 ID	*61 CODE	*62 ID	*63						
1	<input type="text" value="011"/>	<input type="text" value="010"/>	9	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="019"/>	Alarm Rst.	17	<input type="text" value="013"/>	<input type="text" value="010"/>	25	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="019"/>	Alarm Rst.
2	<input type="text" value="013"/>	<input type="text" value="010"/>	10	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trouble	18	<input type="text" value="013"/>	<input type="text" value="010"/>	26	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trouble
3	<input type="text" value="013"/>	<input type="text" value="010"/>	11	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trble Rst.	19	<input type="text" value="013"/>	<input type="text" value="010"/>	27	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trble Rst.
4	<input type="text" value="013"/>	<input type="text" value="010"/>	12	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypass	20	<input type="text" value="013"/>	<input type="text" value="010"/>	28	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypass
5	<input type="text" value="013"/>	<input type="text" value="010"/>	13	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Byps Rst.	21	<input type="text" value="013"/>	<input type="text" value="010"/>	29	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Byps Rst.
6	<input type="text" value="013"/>	<input type="text" value="010"/>	14	<input type="text" value="013"/>	<input type="text" value="010"/>			22	<input type="text" value="013"/>	<input type="text" value="010"/>	30	<input type="text" value="013"/>	<input type="text" value="010"/>		
7	<input type="text" value="013"/>	<input type="text" value="010"/>	15	<input type="text" value="013"/>	<input type="text" value="010"/>			23	<input type="text" value="013"/>	<input type="text" value="010"/>	31	<input type="text" value="013"/>	<input type="text" value="010"/>		
8	<input type="text" value="013"/>	<input type="text" value="010"/>	16	<input type="text" value="013"/>	<input type="text" value="010"/>			24	<input type="text" value="03"/>	<input type="text" value="010"/>	32	<input type="text" value="013"/>	<input type="text" value="010"/>		

ALARM REPORT CODE & ID DIGITS FOR ZONES 33-64 & SUPERVISORY & RESTORE CODES

*64 CODE	*65 ID	*66 CODE	*67 ID	*68	*69 CODE	*70 ID	*71 CODE	*72 ID	*73						
33	<input type="text" value="013"/>	<input type="text" value="010"/>	41	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="019"/>	Alarm Rst.	49	<input type="text" value="011"/>	<input type="text" value="010"/>	57	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="019"/>	Alarm Rst.
34	<input type="text" value="013"/>	<input type="text" value="010"/>	42	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trouble	50	<input type="text" value="011"/>	<input type="text" value="010"/>	58	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trouble
35	<input type="text" value="013"/>	<input type="text" value="010"/>	43	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trble Rst.	51	<input type="text" value="011"/>	<input type="text" value="010"/>	59	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trble Rst.
36	<input type="text" value="013"/>	<input type="text" value="010"/>	44	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypass	52	<input type="text" value="011"/>	<input type="text" value="010"/>	60	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypass
37	<input type="text" value="013"/>	<input type="text" value="010"/>	45	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Byps Rst.	53	<input type="text" value="011"/>	<input type="text" value="010"/>	61	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Byps Rst.
38	<input type="text" value="013"/>	<input type="text" value="010"/>	46	<input type="text" value="013"/>	<input type="text" value="010"/>			54	<input type="text" value="011"/>	<input type="text" value="010"/>	62	<input type="text" value="012"/>	<input type="text" value="010"/>		
39	<input type="text" value="013"/>	<input type="text" value="010"/>	47	<input type="text" value="013"/>	<input type="text" value="010"/>			55	<input type="text" value="011"/>	<input type="text" value="010"/>	63	<input type="text" value="012"/>	<input type="text" value="010"/>		
40	<input type="text" value="013"/>	<input type="text" value="010"/>	48	<input type="text" value="011"/>	<input type="text" value="010"/>			56	<input type="text" value="013"/>	<input type="text" value="010"/>	64	<input type="text" value="013"/>	<input type="text" value="010"/>		

ALARM REPORT CODE & ID DIGITS FOR RF RCVRs & PANICS, & THEIR SUPV. & RESTORE CODES

*74 CODE	*75 ID	*76 CODE	*77 ID	*78			
87	<input type="text" value="017"/>	<input type="text" value="010"/>	89	<input type="text" value="017"/>	<input type="text" value="010"/>	<input type="text" value="019"/>	Alarm Rst.
88	<input type="text" value="017"/>	<input type="text" value="010"/>	90	<input type="text" value="017"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trouble
			91	<input type="text" value="017"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trble Rst.
		Duress	<input type="text" value="012"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypass
			93	<input type="text" value="017"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Byps Rst.
			97	<input type="text" value="017"/>	<input type="text" value="010"/>		
			95	<input type="text" value="012"/>	<input type="text" value="010"/>		(1 + * or A key)
			96	<input type="text" value="012"/>	<input type="text" value="010"/>		(3 + # or C key)
			99	<input type="text" value="012"/>	<input type="text" value="010"/>		(* + # or B key)

SYSTEM NON ALARM CODES

	*81 First Digit	*82 Second Digit	
Close	<input type="text" value="010"/>	<input type="text" value="010"/>	Second digit of each code applies only to 4+2 or expanded (fields *52 & *53) formats.
Open	<input type="text" value="010"/>	<input type="text" value="010"/>	
Low Battery	<input type="text" value="010"/>	<input type="text" value="010"/>	
Low Bat Res.	<input type="text" value="010"/>	<input type="text" value="010"/>	
AC Loss	<input type="text" value="010"/>	<input type="text" value="010"/>	
AC Restore	<input type="text" value="010"/>	<input type="text" value="010"/>	
Test	<input type="text" value="010"/>	<input type="text" value="010"/>	
Power	<input type="text" value="010"/>	<input type="text" value="010"/>	
Cancel	<input type="text" value="010"/>	<input type="text" value="010"/>	
Prog. Tamper	<input type="text" value="010"/>	<input type="text" value="010"/>	

NOTES: 97= Poll Loop Short; 88 & 90 = RCVR not receiving transmitter signals. 89 & 91 = RCVR not responding, bad conn. to panel. 87 = 4285 phone module. 93 = VIM fail

ZONE TYPE RESTORE ENABLES

*79 ZONE TYPES 1-8 All enabled	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>
	1	2	3	4	5	6	7	8
*80 ZONE TYPES 9 & 10 All enabled	<input type="text" value="1"/>	<input type="text" value="1"/>						
	9	10						

ARM STAY & TIME SET REPORT CODES

	1*40 First Digit	1*41 Second Digit
Armed STAY	<input type="text" value="010"/>	<input type="text" value="010"/>
Time/Date set or event log reset	<input type="text" value="010"/>	<input type="text" value="010"/>

COMMUNICATION DEFAULTS for ADEMCO EXPRESS FORMAT (*94 then *81)

- | | | | | | | |
|--------------------------------|--------------------------------|--------------------------------|-----------|--|--------------------------------|--------------------------------|
| *45 PRIMARY FORMAT | <input type="text" value="3"/> | Ademco Express | | *51 DUAL REPORTING | <input type="text" value="0"/> | no |
| *46 LOW SPEED FORMAT (Primary) | <input type="text" value="0"/> | | | *52 STANDARD/EXPANDED REPORT FOR PRIMARY | <input type="text" value="0"/> | <input type="text" value="0"/> |
| *47 SECONDARY FORMAT | <input type="text" value="3"/> | Ademco Express | | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> |
| *48 LOW SPEED FORMAT (Sec.) | <input type="text" value="0"/> | | | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> |
| *49 CHECKSUM VERIFICATION | <input type="text" value="0"/> | <input type="text" value="0"/> | | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> |
| No checksum | | Primary | Secondary | Alarm | Rstr | Bypass |
| *50 SESCOA/RADIONICS SELECT | <input type="text" value="0"/> | Radionics | | Trbl | Opn/Cls | Low Bat |

ALARM REPORT CODE & ID DIGITS FOR ZONES 1-32 & SUPERVISORY & RESTORE CODES

*54 CODE	*55 ID	*56 CODE	*57 ID	*58	*59 CODE	*60 ID	*61 CODE	*62 ID	*63						
1	<input type="text" value="110"/>	<input type="text" value="011"/>	9	<input type="text" value="110"/>	<input type="text" value="019"/>	<input type="text" value="114"/>	Alarm Rst.	17	<input type="text" value="011"/>	<input type="text" value="017"/>	25	<input type="text" value="012"/>	<input type="text" value="015"/>	<input type="text" value="114"/>	Alarm Rst.
2	<input type="text" value="110"/>	<input type="text" value="012"/>	10	<input type="text" value="011"/>	<input type="text" value="110"/>	<input type="text" value="010"/>	Trouble	18	<input type="text" value="011"/>	<input type="text" value="018"/>	26	<input type="text" value="012"/>	<input type="text" value="016"/>	<input type="text" value="010"/>	Trouble
3	<input type="text" value="110"/>	<input type="text" value="013"/>	11	<input type="text" value="011"/>	<input type="text" value="011"/>	<input type="text" value="010"/>	Trble Rst.	19	<input type="text" value="011"/>	<input type="text" value="019"/>	27	<input type="text" value="012"/>	<input type="text" value="017"/>	<input type="text" value="010"/>	Trble Rst.
4	<input type="text" value="110"/>	<input type="text" value="014"/>	12	<input type="text" value="011"/>	<input type="text" value="012"/>	<input type="text" value="010"/>	Bypass	20	<input type="text" value="012"/>	<input type="text" value="110"/>	28	<input type="text" value="012"/>	<input type="text" value="018"/>	<input type="text" value="010"/>	Bypass
5	<input type="text" value="110"/>	<input type="text" value="015"/>	13	<input type="text" value="011"/>	<input type="text" value="013"/>	<input type="text" value="010"/>	Byps Rst.	21	<input type="text" value="012"/>	<input type="text" value="011"/>	29	<input type="text" value="012"/>	<input type="text" value="019"/>	<input type="text" value="010"/>	Byps Rst.
6	<input type="text" value="110"/>	<input type="text" value="016"/>	14	<input type="text" value="011"/>	<input type="text" value="014"/>			22	<input type="text" value="012"/>	<input type="text" value="012"/>	30	<input type="text" value="013"/>	<input type="text" value="110"/>		
7	<input type="text" value="110"/>	<input type="text" value="017"/>	15	<input type="text" value="011"/>	<input type="text" value="015"/>			23	<input type="text" value="012"/>	<input type="text" value="013"/>	31	<input type="text" value="013"/>	<input type="text" value="011"/>		
8	<input type="text" value="110"/>	<input type="text" value="018"/>	16	<input type="text" value="011"/>	<input type="text" value="016"/>			24	<input type="text" value="012"/>	<input type="text" value="014"/>	32	<input type="text" value="013"/>	<input type="text" value="012"/>		

ALARM REPORT CODE & ID DIGITS FOR ZONES 33-64 & SUPERVISORY & RESTORE CODES

*64 CODE	*65 ID	*66 CODE	*67 ID	*68	*69 CODE	*70 ID	*71 CODE	*72 ID	*73						
33	<input type="text" value="013"/>	<input type="text" value="013"/>	41	<input type="text" value="014"/>	<input type="text" value="011"/>	<input type="text" value="114"/>	Alarm Rst.	49	<input type="text" value="014"/>	<input type="text" value="019"/>	57	<input type="text" value="015"/>	<input type="text" value="017"/>	<input type="text" value="114"/>	Alarm Rst.
34	<input type="text" value="013"/>	<input type="text" value="014"/>	42	<input type="text" value="014"/>	<input type="text" value="012"/>	<input type="text" value="010"/>	Trouble	50	<input type="text" value="015"/>	<input type="text" value="110"/>	58	<input type="text" value="015"/>	<input type="text" value="018"/>	<input type="text" value="010"/>	Trouble
35	<input type="text" value="013"/>	<input type="text" value="015"/>	43	<input type="text" value="014"/>	<input type="text" value="013"/>	<input type="text" value="010"/>	Trble Rst.	51	<input type="text" value="015"/>	<input type="text" value="011"/>	59	<input type="text" value="015"/>	<input type="text" value="019"/>	<input type="text" value="010"/>	Trble Rst.
36	<input type="text" value="013"/>	<input type="text" value="016"/>	44	<input type="text" value="014"/>	<input type="text" value="014"/>	<input type="text" value="010"/>	Bypass	52	<input type="text" value="015"/>	<input type="text" value="012"/>	60	<input type="text" value="016"/>	<input type="text" value="110"/>	<input type="text" value="010"/>	Bypass
37	<input type="text" value="013"/>	<input type="text" value="017"/>	45	<input type="text" value="014"/>	<input type="text" value="015"/>	<input type="text" value="010"/>	Byps Rst.	53	<input type="text" value="015"/>	<input type="text" value="013"/>	61	<input type="text" value="016"/>	<input type="text" value="011"/>	<input type="text" value="010"/>	Byps Rst.
38	<input type="text" value="013"/>	<input type="text" value="018"/>	46	<input type="text" value="014"/>	<input type="text" value="016"/>			54	<input type="text" value="015"/>	<input type="text" value="014"/>	62	<input type="text" value="016"/>	<input type="text" value="012"/>		
39	<input type="text" value="013"/>	<input type="text" value="019"/>	47	<input type="text" value="014"/>	<input type="text" value="017"/>			55	<input type="text" value="015"/>	<input type="text" value="015"/>	63	<input type="text" value="016"/>	<input type="text" value="013"/>		
40	<input type="text" value="014"/>	<input type="text" value="110"/>	48	<input type="text" value="014"/>	<input type="text" value="018"/>			56	<input type="text" value="015"/>	<input type="text" value="016"/>	64	<input type="text" value="016"/>	<input type="text" value="014"/>		

ALARM REPORT CODE & ID DIGITS FOR RF RCVRs & PANICS, & THEIR SUPV. & RESTORE CODES

*74 CODE	*75 ID	*76 CODE	*77 ID	*78			
87	<input type="text" value="018"/>	<input type="text" value="017"/>	89	<input type="text" value="018"/>	<input type="text" value="019"/>	<input type="text" value="114"/>	Alarm Rst.
88	<input type="text" value="018"/>	<input type="text" value="018"/>	90	<input type="text" value="019"/>	<input type="text" value="110"/>	<input type="text" value="010"/>	Trouble
			91	<input type="text" value="019"/>	<input type="text" value="011"/>	<input type="text" value="010"/>	Trble Rst.
		Duress	<input type="text" value="113"/>	<input type="text" value="113"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypass
			93	<input type="text" value="019"/>	<input type="text" value="013"/>	<input type="text" value="010"/>	Byps Rst.
			97	<input type="text" value="019"/>	<input type="text" value="017"/>		
			95	<input type="text" value="019"/>	<input type="text" value="015"/>	(1 + * or A key)	
			96	<input type="text" value="019"/>	<input type="text" value="016"/>	(3 + # or C key)	
			99	<input type="text" value="019"/>	<input type="text" value="019"/>	(* + # or B key)	

SYSTEM NON ALARM CODES

	*81 First Digit	*82 Second Digit
Close	<input type="text" value="010"/>	<input type="text" value="010"/>
Open	<input type="text" value="010"/>	<input type="text" value="010"/>
Low Battery	<input type="text" value="010"/>	<input type="text" value="010"/>
Low Bat Res.	<input type="text" value="010"/>	<input type="text" value="010"/>
AC Loss	<input type="text" value="010"/>	<input type="text" value="010"/>
AC Restore	<input type="text" value="010"/>	<input type="text" value="010"/>
Test	<input type="text" value="010"/>	<input type="text" value="010"/>
Power	<input type="text" value="010"/>	<input type="text" value="010"/>
Cancel	<input type="text" value="010"/>	<input type="text" value="010"/>
Prog. Tamper	<input type="text" value="010"/>	<input type="text" value="010"/>

Second digit of each code applies only to 4+2 or expanded (fields *52 & *53) formats.

NOTES: 97= Poll Loop Short; 88 & 90 = RCVR not receiving transmitter signals. 89 & 91 = RCVR not responding, bad conn. to panel. 87 = 4285 phone module. 93 = VIM fail

ZONE TYPE RESTORE ENABLES

- *79 ZONE TYPES 1-8 All enabled
- | | | | | | | | |
|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
- *80 ZONE TYPES 9 & 10
- | | |
|--------------------------------|--------------------------------|
| <input type="text" value="1"/> | <input type="text" value="1"/> |
|--------------------------------|--------------------------------|

All enabled

9 10

ARM STAY & TIME SET REPORT CODES

1*40 **1*41**
First Digit Second Digit

Armed STAY	<input type="text" value="010"/>	<input type="text" value="010"/>
Time/Date set or event log reset	<input type="text" value="010"/>	<input type="text" value="010"/>

COMMUNICATION DEFAULTS for ADEMCO HIGH SPEED FORMAT (*94 then *82)

- | | | | | | |
|--------------------------------|--------------------------------|--------------------------------|--|--------------------------------|--------------------------------|
| *45 PRIMARY FORMAT | <input type="text" value="2"/> | Ademco High Speed | *51 DUAL REPORTING | <input type="text" value="0"/> | no |
| *46 LOW SPEED FORMAT (Primary) | <input type="text" value="0"/> | | *52 STANDARD/EXPANDED REPORT FOR PRIMARY | <input type="text" value="0"/> | <input type="text" value="0"/> |
| *47 SECONDARY FORMAT | <input type="text" value="2"/> | Ademco High Speed | Alarm | <input type="text" value="0"/> | <input type="text" value="0"/> |
| *48 LOW SPEED FORMAT (Sec.) | <input type="text" value="0"/> | | Rstr | <input type="text" value="0"/> | <input type="text" value="0"/> |
| *49 CHECKSUM VERIFICATION | <input type="text" value="0"/> | <input type="text" value="0"/> | Bypass | <input type="text" value="0"/> | <input type="text" value="0"/> |
| No checksum | | Primary | Trbl | <input type="text" value="0"/> | <input type="text" value="0"/> |
| | | Secondary | Opn/Cls | <input type="text" value="0"/> | <input type="text" value="0"/> |
| *50 SESCOA/RADIONICS SELECT | <input type="text" value="0"/> | Radionics | Low Bat | <input type="text" value="0"/> | <input type="text" value="0"/> |

ALARM REPORT CODE & ID DIGITS FOR ZONES 1-32 & SUPERVISORY & RESTORE CODES

*54 CODE	*55 ID	*56 CODE	*57 ID	*58	*59 CODE	*60 ID	*61 CODE	*62 ID	*63						
1	<input type="text" value="011"/>	<input type="text" value="010"/>	9	<input type="text" value="013"/>	<input type="text" value="010"/>	011	Alarm Rst.	17	<input type="text" value="014"/>	<input type="text" value="010"/>	25	<input type="text" value="014"/>	<input type="text" value="010"/>	<input type="text" value="011"/>	Alarm Rst.
2	<input type="text" value="012"/>	<input type="text" value="010"/>	10	<input type="text" value="013"/>	<input type="text" value="010"/>	010	Trouble	18	<input type="text" value="014"/>	<input type="text" value="010"/>	26	<input type="text" value="014"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trouble
3	<input type="text" value="012"/>	<input type="text" value="010"/>	11	<input type="text" value="013"/>	<input type="text" value="010"/>	010	Trble Rst.	19	<input type="text" value="014"/>	<input type="text" value="010"/>	27	<input type="text" value="014"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trble Rst.
4	<input type="text" value="012"/>	<input type="text" value="010"/>	12	<input type="text" value="013"/>	<input type="text" value="010"/>	010	Bypass	20	<input type="text" value="014"/>	<input type="text" value="010"/>	28	<input type="text" value="014"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypass
5	<input type="text" value="012"/>	<input type="text" value="010"/>	13	<input type="text" value="013"/>	<input type="text" value="010"/>	010	Byps Rst.	21	<input type="text" value="014"/>	<input type="text" value="010"/>	29	<input type="text" value="014"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Byps Rst.
6	<input type="text" value="012"/>	<input type="text" value="010"/>	14	<input type="text" value="013"/>	<input type="text" value="010"/>			22	<input type="text" value="014"/>	<input type="text" value="010"/>	30	<input type="text" value="014"/>	<input type="text" value="010"/>		
7	<input type="text" value="012"/>	<input type="text" value="010"/>	15	<input type="text" value="013"/>	<input type="text" value="010"/>			23	<input type="text" value="014"/>	<input type="text" value="010"/>	31	<input type="text" value="014"/>	<input type="text" value="010"/>		
8	<input type="text" value="012"/>	<input type="text" value="010"/>	16	<input type="text" value="013"/>	<input type="text" value="010"/>			24	<input type="text" value="014"/>	<input type="text" value="010"/>	32	<input type="text" value="015"/>	<input type="text" value="010"/>		

ALARM REPORT CODE & ID DIGITS FOR ZONES 33-64 & SUPERVISORY & RESTORE CODES

*64 CODE	*65 ID	*66 CODE	*67 ID	*68	*69 CODE	*70 ID	*71 CODE	*72 ID	*73						
33	<input type="text" value="015"/>	<input type="text" value="010"/>	41	<input type="text" value="015"/>	<input type="text" value="010"/>	011	Alarm Rst.	49	<input type="text" value="011"/>	<input type="text" value="010"/>	57	<input type="text" value="016"/>	<input type="text" value="010"/>	<input type="text" value="011"/>	Alarm Rst.
34	<input type="text" value="015"/>	<input type="text" value="010"/>	42	<input type="text" value="015"/>	<input type="text" value="010"/>	010	Trouble	50	<input type="text" value="011"/>	<input type="text" value="010"/>	58	<input type="text" value="016"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trouble
35	<input type="text" value="015"/>	<input type="text" value="010"/>	43	<input type="text" value="015"/>	<input type="text" value="010"/>	010	Trble Rst.	51	<input type="text" value="011"/>	<input type="text" value="010"/>	59	<input type="text" value="016"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trble Rst.
36	<input type="text" value="015"/>	<input type="text" value="010"/>	44	<input type="text" value="015"/>	<input type="text" value="010"/>	010	Bypass	52	<input type="text" value="011"/>	<input type="text" value="010"/>	60	<input type="text" value="016"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypass
37	<input type="text" value="015"/>	<input type="text" value="010"/>	45	<input type="text" value="015"/>	<input type="text" value="010"/>	010	Byps Rst.	53	<input type="text" value="011"/>	<input type="text" value="010"/>	61	<input type="text" value="016"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Byps Rst.
38	<input type="text" value="015"/>	<input type="text" value="010"/>	46	<input type="text" value="015"/>	<input type="text" value="010"/>			54	<input type="text" value="011"/>	<input type="text" value="010"/>	62	<input type="text" value="019"/>	<input type="text" value="010"/>		
39	<input type="text" value="015"/>	<input type="text" value="010"/>	47	<input type="text" value="015"/>	<input type="text" value="010"/>			55	<input type="text" value="011"/>	<input type="text" value="010"/>	63	<input type="text" value="019"/>	<input type="text" value="010"/>		
40	<input type="text" value="015"/>	<input type="text" value="010"/>	48	<input type="text" value="011"/>	<input type="text" value="010"/>			56	<input type="text" value="016"/>	<input type="text" value="010"/>	64	<input type="text" value="016"/>	<input type="text" value="010"/>		

ALARM REPORT CODE & ID DIGITS FOR RF RCVRs & PANICS, & THEIR SUPV. & RESTORE CODES

*74 CODE	*75 ID	*76 CODE	*77 ID	*78			
87	<input type="text" value="017"/>	<input type="text" value="010"/>	89	<input type="text" value="017"/>	<input type="text" value="010"/>	011	Alarm Rst.
88	<input type="text" value="017"/>	<input type="text" value="010"/>	90	<input type="text" value="018"/>	<input type="text" value="010"/>	010	Trouble
			91	<input type="text" value="018"/>	<input type="text" value="010"/>	010	Trble Rst.
		Duress		<input type="text" value="011"/>	<input type="text" value="010"/>	010	Bypass
			93	<input type="text" value="017"/>	<input type="text" value="010"/>	010	Byps Rst.
			97	<input type="text" value="017"/>	<input type="text" value="010"/>		
			95	<input type="text" value="110"/>	<input type="text" value="010"/>		(1 + * or A key)
			96	<input type="text" value="111"/>	<input type="text" value="010"/>		(3 + # or C key)
			99	<input type="text" value="112"/>	<input type="text" value="010"/>		(* + # or B key)

SYSTEM NON ALARM CODES

	*81 First Digit	*82 Second Digit
Close	<input type="text" value="010"/>	<input type="text" value="010"/>
Open	<input type="text" value="010"/>	<input type="text" value="010"/>
Low Battery	<input type="text" value="010"/>	<input type="text" value="010"/>
Low Bat Res.	<input type="text" value="010"/>	<input type="text" value="010"/>
AC Loss	<input type="text" value="010"/>	<input type="text" value="010"/>
AC Restore	<input type="text" value="010"/>	<input type="text" value="010"/>
Test	<input type="text" value="010"/>	<input type="text" value="010"/>
Power	<input type="text" value="010"/>	<input type="text" value="010"/>
Cancel	<input type="text" value="010"/>	<input type="text" value="010"/>
Prog. Tamper	<input type="text" value="010"/>	<input type="text" value="010"/>

Second digit of each code applies only to 4+2 or expanded (fields *52 & *53) formats.

NOTES: 97= Poll Loop Short; 88 & 90 = RCVR not receiving transmitter signals. 89 & 91 = RCVR not responding, bad conn. to panel.
87 = 4285 phone module, 93 = VIM fail.

ZONE TYPE RESTORE ENABLES

- *79 ZONE TYPES 1-8 All enabled
- | | | | | | | | |
|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
- *80 ZONE TYPES 9 & 10
- | | |
|--------------------------------|--------------------------------|
| <input type="text" value="1"/> | <input type="text" value="1"/> |
|--------------------------------|--------------------------------|

All enabled

9 10

ARM STAY & TIME SET REPORT CODES

1*40 **1*41**
First Digit Second Digit

Armed STAY	<input type="text" value="010"/>	<input type="text" value="010"/>
Time/Date set or event log reset	<input type="text" value="010"/>	<input type="text" value="010"/>

COMMUNICATION DEFAULTS for ADEMCO's CONTACT ID FORMAT (*94 then *83)

- *45 PRIMARY FORMAT 1 Ademco Contact ID
- *46 LOW SPEED FORMAT (Primary) 0
- *47 SECONDARY FORMAT 1 Ademco Contact ID
- *48 LOW SPEED FORMAT (Sec.) 0
- *49 CHECKSUM VERIFICATION 0 0
No checksum Primary Secondary
- *50 SESCOA/RADIONICS SELECT 0 Radionics
- *51 DUAL REPORTING 0 no
- *52 STANDARD/EXPANDED REPORT FOR PRIMARY
 0 0 0 0 0 0 standard
Alarm Rstr Bypass Trbl Opn/Cls Low Bat
- *53 STANDARD/EXPANDED REPORT FOR SECONDARY
 0 0 0 0 0 0 standard
Alarm Rstr Bypass Trbl Opn/Cls Low Bat

ALARM REPORT CODE & ID DIGITS FOR ZONES 1-32 & SUPERVISORY & RESTORE CODES

*54 CODE	*55 ID	*56 CODE	*57 ID	*58	*59 CODE	*60 ID	*61 CODE	*62 ID	*63						
1	<input type="checkbox"/> 011	<input type="checkbox"/> 010	9	<input type="checkbox"/> 019	<input type="checkbox"/> 010	<input type="checkbox"/> 011	Alarm Rst.	17	<input type="checkbox"/> 012	<input type="checkbox"/> 010	25	<input type="checkbox"/> 110	<input type="checkbox"/> 010	<input type="checkbox"/> 011	Alarm Rst.
2	<input type="checkbox"/> 012	<input type="checkbox"/> 010	10	<input type="checkbox"/> 110	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Trouble	18	<input type="checkbox"/> 013	<input type="checkbox"/> 010	26	<input type="checkbox"/> 111	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Trouble
3	<input type="checkbox"/> 013	<input type="checkbox"/> 010	11	<input type="checkbox"/> 111	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Trble Rst.	19	<input type="checkbox"/> 014	<input type="checkbox"/> 010	27	<input type="checkbox"/> 112	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Trble Rst.
4	<input type="checkbox"/> 014	<input type="checkbox"/> 010	12	<input type="checkbox"/> 112	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Bypass	20	<input type="checkbox"/> 015	<input type="checkbox"/> 010	28	<input type="checkbox"/> 113	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Bypass
5	<input type="checkbox"/> 015	<input type="checkbox"/> 010	13	<input type="checkbox"/> 113	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Byppss Rst.	21	<input type="checkbox"/> 016	<input type="checkbox"/> 010	29	<input type="checkbox"/> 114	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Byppss Rst.
6	<input type="checkbox"/> 016	<input type="checkbox"/> 010	14	<input type="checkbox"/> 114	<input type="checkbox"/> 010			22	<input type="checkbox"/> 017	<input type="checkbox"/> 010	30	<input type="checkbox"/> 115	<input type="checkbox"/> 010		
7	<input type="checkbox"/> 017	<input type="checkbox"/> 010	15	<input type="checkbox"/> 115	<input type="checkbox"/> 010			23	<input type="checkbox"/> 018	<input type="checkbox"/> 010	31	<input type="checkbox"/> 011	<input type="checkbox"/> 010		
8	<input type="checkbox"/> 018	<input type="checkbox"/> 010	16	<input type="checkbox"/> 011	<input type="checkbox"/> 010			24	<input type="checkbox"/> 019	<input type="checkbox"/> 010	32	<input type="checkbox"/> 012	<input type="checkbox"/> 010		

ALARM REPORT CODE & ID DIGITS FOR ZONES 33-64 & SUPERVISORY & RESTORE CODES

*64 CODE	*65 ID	*66 CODE	*67 ID	*68	*69 CODE	*70 ID	*71 CODE	*72 ID	*73						
33	<input type="checkbox"/> 013	<input type="checkbox"/> 010	41	<input type="checkbox"/> 111	<input type="checkbox"/> 010	<input type="checkbox"/> 011	Alarm Rst.	49	<input type="checkbox"/> 014	<input type="checkbox"/> 010	57	<input type="checkbox"/> 112	<input type="checkbox"/> 010	<input type="checkbox"/> 011	Alarm Rst.
34	<input type="checkbox"/> 014	<input type="checkbox"/> 010	42	<input type="checkbox"/> 112	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Trouble	50	<input type="checkbox"/> 015	<input type="checkbox"/> 010	58	<input type="checkbox"/> 113	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Trouble
35	<input type="checkbox"/> 015	<input type="checkbox"/> 010	43	<input type="checkbox"/> 113	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Trble Rst.	51	<input type="checkbox"/> 016	<input type="checkbox"/> 010	59	<input type="checkbox"/> 114	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Trble Rst.
36	<input type="checkbox"/> 016	<input type="checkbox"/> 010	44	<input type="checkbox"/> 114	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Bypass	52	<input type="checkbox"/> 017	<input type="checkbox"/> 010	60	<input type="checkbox"/> 115	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Bypass
37	<input type="checkbox"/> 017	<input type="checkbox"/> 010	45	<input type="checkbox"/> 115	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Byppss Rst.	53	<input type="checkbox"/> 018	<input type="checkbox"/> 010	61	<input type="checkbox"/> 011	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Byppss Rst.
38	<input type="checkbox"/> 018	<input type="checkbox"/> 010	46	<input type="checkbox"/> 011	<input type="checkbox"/> 010			54	<input type="checkbox"/> 019	<input type="checkbox"/> 010	62	<input type="checkbox"/> 012	<input type="checkbox"/> 010		
39	<input type="checkbox"/> 019	<input type="checkbox"/> 010	47	<input type="checkbox"/> 012	<input type="checkbox"/> 010			55	<input type="checkbox"/> 110	<input type="checkbox"/> 010	63	<input type="checkbox"/> 013	<input type="checkbox"/> 010		
40	<input type="checkbox"/> 110	<input type="checkbox"/> 010	48	<input type="checkbox"/> 013	<input type="checkbox"/> 010			56	<input type="checkbox"/> 111	<input type="checkbox"/> 010	64	<input type="checkbox"/> 014	<input type="checkbox"/> 010		

ALARM REPORT CODE & ID DIGITS FOR RF RCVRs & PANICS, & THEIR SUPV. & RESTORE CODES

*74 CODE	*75 ID	*76 CODE	*77 ID	*78			
87	<input type="checkbox"/> 112	<input type="checkbox"/> 010	89	<input type="checkbox"/> 114	<input type="checkbox"/> 010	<input type="checkbox"/> 011	Alarm Rst.
88	<input type="checkbox"/> 113	<input type="checkbox"/> 010	90	<input type="checkbox"/> 115	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Trouble
			91	<input type="checkbox"/> 011	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Trble Rst.
		Duress	92	<input type="checkbox"/> 012	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Bypass
			93	<input type="checkbox"/> 112	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Byppss Rst.
			97	<input type="checkbox"/> 013	<input type="checkbox"/> 010		
			95	<input type="checkbox"/> 014	<input type="checkbox"/> 010		(1 + * or A key)
			96	<input type="checkbox"/> 015	<input type="checkbox"/> 010		(3 + # or C key)
			99	<input type="checkbox"/> 016	<input type="checkbox"/> 010		(* + # or B key)

SYSTEM NON ALARM CODES

	*81 First Digit	*82 Second Digit
Close	<input type="checkbox"/> 010	<input type="checkbox"/> 010
Open	<input type="checkbox"/> 010	<input type="checkbox"/> 010
Low Battery	<input type="checkbox"/> 010	<input type="checkbox"/> 010
Low Bat Res.	<input type="checkbox"/> 010	<input type="checkbox"/> 010
AC Loss	<input type="checkbox"/> 010	<input type="checkbox"/> 010
AC Restore	<input type="checkbox"/> 010	<input type="checkbox"/> 010
Test	<input type="checkbox"/> 010	<input type="checkbox"/> 010
Power	<input type="checkbox"/> 010	<input type="checkbox"/> 010
Cancel	<input type="checkbox"/> 010	<input type="checkbox"/> 010
Prog. Tamper	<input type="checkbox"/> 010	<input type="checkbox"/> 010

Second digit of each code applies only to 4+2 or expanded (fields *52 & *53) formats.

NOTES: 97= Poll Loop Short; 88 & 90 = RCVR not receiving transmitter signals. 89 & 91 = RCVR not responding, bad conn. to panel. 87 = 4285 phone module. 93 = VIM fail

ZONE TYPE RESTORE ENABLES

- *79 ZONE TYPES 1-8 All enabled
 1 1 1 1 1 1 1 1
1 2 3 4 5 6 7 8
- *80 ZONE TYPES 9 & 10 1 1

All enabled

9 10

ARM STAY & TIME SET REPORT CODES

1*40 **1*41**
First Digit Second Digit

Armed STAY	<input type="text" value="010"/>	<input type="text" value="010"/>
Time/Date set or event log reset	<input type="text" value="010"/>	<input type="text" value="010"/>

Section 6. DOWNLOADING

REMOTE DOWNLOADING

What Is Downloading?

Downloading allows the operator at a remote facility to access, program, and control the security system over normal telephone lines. Anything that can be done directly from the keypad can be done remotely, using DOWNLOADING.

UL NOTE: Downloading is not permissible for UL installations.

To Download, the following is required at the remote facility:

1. An IBM PC, or compatible computer with MS DOS 3.1 or higher, to run the DOWNLOADING program. MS DOS stands for: Microsoft Disk Operating System.
2. A HAYES 1200 SMARTMODEM (external: level 1.2 or higher; internal: level 1.1 or higher; if these levels cannot be found locally, an external modem can be purchased from ADEMCO, or contact HAYES for a free update) or HAYES OPTIMA 24 PLUS FAX96 MODEM. *Other brands are not compatible, even if claimed to be 100% compatible.*
3. Ademco's V-Link[®] downloading software (Rev. 4 or higher) or Ademco's Compass Windows downloading software. This software includes a complete User's Manual.

Site-initiated Downloading

Telco Hand-off feature allows the technician at the site to call the downloading facility from the control panel phone line and initiate a site download by keying Installer or Master Code + # + 1. The control will immediately be on-line with the modem at the downloading facility. Also, if a local computer has a modem, the telephone line terminals of the control can be connected to the modem, and a direct download connection can be established with the new downloader program.

How Does Downloading Work?

At the protected premises, the Control panel must be connected to the existing telephone line (refer to the PHONE LINE CONNECTIONS section). No programming of the panel is required before downloading to an initial installation. However, it is recommended that factory defaults be loaded first by keying *97.

To download from a remote facility, do the following:

1. Enter the installer code + [#] + [5]. The panel temporarily enables a ring count of 5 and sets the Download Callback option to "1" (callback not required).
2. Call the panel using the downloader software set to "FIRST COMMUNICATION" mode.
3. The downloader will establish a session with no callback. The panel information can then be downloaded.

In order to remotely access, control, or program the alarm panel, a "link" must be established between the computer and the control panel, as follows:

1. The computer calls up the Control panel. (The phone number for each customer is entered into the customer's account file on the computer).
2. The Control panel "answers" at the pre-programmed ring count and executes a handshake with the computer.
3. The computer sends a request for call-back to the Control, unless call-back is not required.
4. The panel acknowledges the request and hangs up. During the next few seconds, the Control will process the request making sure certain encrypted information, received from the computer, matches its own memory.
5. Upon a successful match, the Control panel will seize the phone line and call the computer back, unless call-back is not required.
6. The computer answers, usually by the second ring, and executes a handshake with the panel.
7. The panel then sends other default information to the computer. If this information matches the computer's information, a successful link is established. This is known as being "ON-LINE".

Advisories:

1. Alarm and trouble responses and reports are disabled during on-line time. Should an event occur during this time, the response will take place and the report will go through as soon as the remote access sequence is completed. Alarm and trouble conditions are not ignored, they are simply delayed.
2. The keypads are inactive during downloading communication, and resume normal functions after hang up. All keypad entries are ignored during on-line time.

What Can Be Done Once Panel Is "On-Line"?

- Arm the System in the Away Mode; Disarm the System
- Bypass a Zone
- Force the System to Accept a New Program Download
- Shut Down Communication (dialer) Functions (non-payment of monitoring fees in an owned system)
- Shut Down all Security System Functions (non-payment for a leased system)
- Inhibit Local Keypad Programming (prevents takeover of your accounts)
- Leave a message for customer (alpha keypads ONLY)
- Command the System to Upload a Copy of its Resident Program to the office
- Read: Arming Status, AC Power Status, List of Faulted Zones, List of Bypassed Zones, 100 Event Log, List of Zones Currently in Alarm, List of Zones Currently in Trouble, List of RF sensors with low battery conditions
- Set the Real-Time clock.

How Secure Is Downloading?

Accessing the Control from a remote location is protected against compromise by the use of 4 levels of protection:

1. Security Code Handshake: The subscriber's account number as well as an 8-digit ID number (known only to the office) must be matched between the Control and computer.
2. Hang-Up and Call-Back: The Control panel will "hang-up" and call the computer back at the pre-programmed number only if the security codes match.
3. Data Encryption: All data that is exchanged between the computer and Control is encrypted to reduce the possibility of anyone "tapping" the line and corrupting data.
4. Operator Access Levels: Up to 15 operators can have access to the DOWNLOADER, each having their own log-on code. However, each operator can be assigned one of three levels of access in both FILE and COMMAND functions, as follows:

File Access:

Read Only: able only to look at the database; cannot change any information, and cannot see the customer's access codes.

Part Read/Write: able to look at and change all information, except the customer's access codes.

Full Read/Write: able to look at and change any and all information in the database.

Control/Comm Access:

Read Only: able only to Upload and arm the system. Not able to DISARM, BYPASS, or change any information.

Part Read/Write: able to ARM, BYPASS, UPLOAD, DOWNLOAD but cannot shutdown the system.

Full Read/Write: able to perform all control and status commands, as well as shutdown all or part of the system.

NOTES:

1. Each time the Control panel is accessed (whether successful or unsuccessful), a PROGRAM TAMPER report (*40) is sent to central station, if programmed.
2. When downloading, the keypad will display "MODEM COMM".
3. Whenever a download or a save is performed, an automatic time stamp is done in the downloading software, indicating the date and time of the last download (or save) and the operator ID number.
4. The average time for a complete download, including initial call-up, hang-up and call-back is under 4 minutes.
5. A complete hard copy of each individual account can be obtained by connecting a printer to the computer. Refer to your computer owner's manual or contact your dealer for printer recommendations.

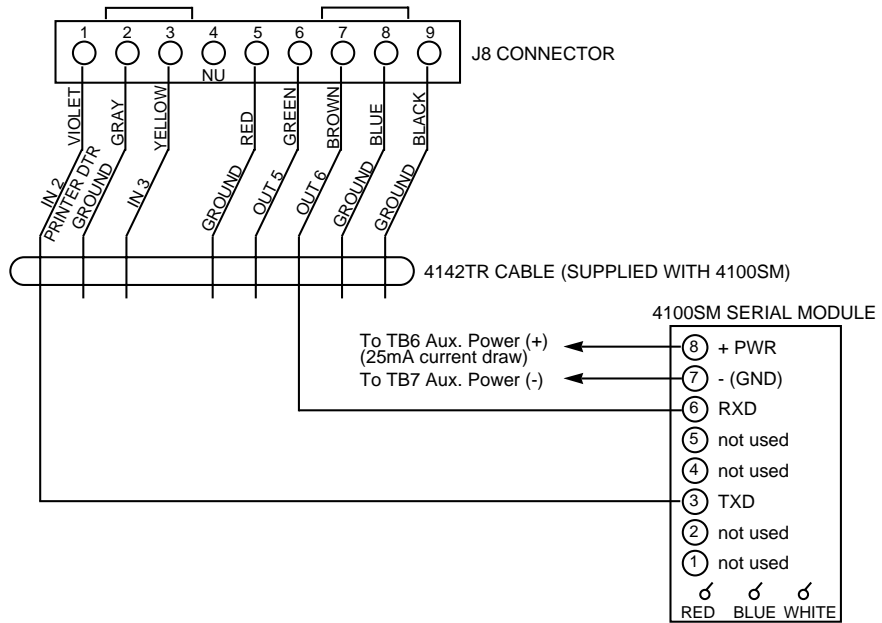
DIRECT WIRE DOWNLOADING

Direct Wire Downloading Connections

The VISTA-40 can be downloaded without using a modem or telephone line by using Ademco's V-Link[®] downloading software (Rev. 4 or higher) or Ademco's *Compass* Windows downloading software, and a 4100SM Serial Module. The direct wire downloading connection is to be temporary, and is not part of the permanent installation. Direct wire downloading is meant as a tool for the installer during the installation process.

IMPORTANT: The connections between the VISTA-40 and the 4100SM are different than those shown in the 4100SM Installation Instructions. See diagram below for correct connections. In addition, when the "green" wire is referred to in step 2 of the IN CASE OF DIFFICULTY section of the 4100SM Instructions, **use the "violet" wire.**

Connector J8, located above connector J7 on the right hand side of the main PC board, is intended to be interfaced to a computer. Make connections to a computer as shown below.



DIRECT WIRE DOWNLOADING CONNECTIONS

Section 7. SETTING THE REAL-TIME CLOCK

PROCEDURE

IMPORTANT:
This method is different from the previous method of setting the clock.

NOTE: A 6139 alpha keypad must be used to set the real-time clock, or the clock can be set via the Downloader software. Only users with installer or master authority level can set the real-time clock.

To enter real-time clock mode, enter installer or master code + #63. A typical display will show:

```
TIME/DATE - THU
12:01 AM 11/07/96
```

The day of the week is automatically calculated based on the date entered. Time and date entries are made by simply entering the appropriate hour, minute, month, day and year. Pressing the [*] key accepts the entered value and moves the cursor to the right. Pressing the [#] key moves the cursor to the left of the display, to the previous position.

To set the time and date, simply enter the correct hour, then press [*] to move to the minutes and make the correct entry.

Press [*] again, then toggle the AM/PM by pressing any key 0–9.

Press [*] to move cursor to the month position and enter the correct month using a 2-digit entry.

Press [*] and enter the correct date.

Press [*] and enter the correct year.

To exit clock mode, press the [*] key after the cursor is in the year position.

Time adjustments for daylight savings time are handled automatically by the system (see data field options 2*01 and 2*02).

PART 3

SYSTEM OPERATION & TESTING

Section 1. SYSTEM OPERATION

SECURITY ACCESS CODES

General Information The System allows up to a total of 70 security access codes to be assigned (maximum of 69 in a given partition), each identified by a user ID number. In addition, the Quick Arm feature can also be programmed, which enables the [#] key to be pressed instead of entering the security code when arming the system. The code must still be entered when disarming the system.

NOTE: Open/Close reporting of Quick Arm is enabled if User 2 is enabled for Open/Close reporting. Quick Arm reports as User 0.

User Codes & Levels Of Authority Each user of the system can be assigned various levels of authority (tells system what system functions that user is authorized to do), and can have different levels of authority within each partition. Use the "View Capabilities" keypad function to view the partitions and authority levels for which a particular user is authorized. In highest to lowest ranking, these levels are described below.

Level	Title
0	Installer
1	Master
2	Manager
3	Operator level A
4	Operator level B
5	Operator level C
6	Duress

<p>Installer (Level 0) User 1</p>	<ul style="list-style-type: none"> • Programmed in field *00 (default = 4-1-4-0). Can be changed by installer. • Can perform all system functions (arm, disarm, bypass, etc.). • Only code that allows entry to program mode. • Installer code lockout if exit program mode via *98. This prevents installer from re-accessing the program mode. The only way to access Programming mode once this feature is activated, is by powering down the system and powering up again, and then pressing both the * and # keys at the same time within 30 seconds of power up. • The installer must program at least one master code. Master codes are the codes intended for use by the primary users of the system. • Can add, delete, or change master, manager, or operator codes. • Can select open/close reports for any user. • Can perform normal system functions, but cannot disarm if armed by a code other than Installer's code (including Quick Arm). • Enable open/close reporting for installer in field *39.
<p>Master (Level 1)</p>	<ul style="list-style-type: none"> • The Master Code is the code intended for use by the primary users of the system when performing system functions, and can be changed by the Master User. • The master codes can be used to assign up to 68 lower level codes, which can be used by other users of the system who don't have a need to know the master code. • As shipped from the factory, there are no master or manager codes pre-programmed. The installer must program at least one master code during initial installation. • Master cannot assign anybody a level of 0 or 1. • Can change his own code. • Can add, delete, change manager or operator codes. Each user's code can be individually eliminated or changed at any time. • Open/close reporting of added users are same as that of the master or manager adding the new user. • Can perform all system functions.

User Codes & Levels Of Authority (cont.)

Open/Close Reporting

Note: When adding a user, the system will only prompt for Open/Close report capability if the user is being added by the Installer. When a Master or Manager adds a new user, the new user's Open/Close reporting enable will be the same as that of the Master or Manager adding the user. If Open/Close reports are required to be selectable by the Master or Manager, the Installer should assign two Master or Manager user codes: one with Open/Close reporting enabled, and one without Open/Close reporting.

<p>Manager (Level 2)</p>	<ul style="list-style-type: none"> • Can perform all system functions (Arm, Disarm, Bypass, etc.) programmed by Master. • May create other users of the system below this level (Manager cannot assign anybody a level of 0, 1, or 2). • May change his own code. • May add, delete, change operators. • Open/close reporting of added users will be same as his own (enabled/disabled as set by installer or master). • May operate a partition. 												
<p>Operator (Levels 3-5)</p>	<ul style="list-style-type: none"> • Operators can arm and disarm the system to the authority assigned, but cannot add or modify any user code. • May operate a partition with one of the three OPERATOR authority levels A through C listed below. <table border="1" data-bbox="808 516 1393 667"> <thead> <tr> <th>Level</th> <th>Title</th> <th>Functions Permitted</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>Operator A</td> <td>Arm, Disarm, Bypass</td> </tr> <tr> <td>4</td> <td>Operator B</td> <td>Arm, Disarm</td> </tr> <tr> <td>5</td> <td>Operator C</td> <td>Arm, Disarm only if armed with same code</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Operator C (sometimes known as Baby-sitter code), cannot disarm the system unless the system was armed with that code. This code is usually assigned to persons who may have the need to arm and disarm the system at specific times only (ex. a baby-sitter needs to control the system only when baby-sitting). 	Level	Title	Functions Permitted	3	Operator A	Arm, Disarm, Bypass	4	Operator B	Arm, Disarm	5	Operator C	Arm, Disarm only if armed with same code
Level	Title	Functions Permitted											
3	Operator A	Arm, Disarm, Bypass											
4	Operator B	Arm, Disarm											
5	Operator C	Arm, Disarm only if armed with same code											
<p>Duress (Level 6)</p>	<ul style="list-style-type: none"> • The duress code is a means of sending a silent alarm to a central monitoring station if the user is being forced to disarm (or arm) the system under threat. This feature is only useful if the system is connected to a central station. • When the system's Auxiliary Voltage Triggers are connected to another communication's media (Derived Channel/Long Range Radio), note that duress is signaled on the same trigger that signals silent panic (whereas duress has a unique report when digitally communicated). • The duress code is assigned on a partition by partition basis and can be any code desired. • When used, the system will disarm (or arm), but will also send a silent alarm to the central station (if service is connected). There will be no indication at the keypad that an alarm was sent. • Duress Reporting Note: The Duress report triggering logic activates on the 5th key depression (ex. OFF), not the 4th key depression (last digit of code). Duress reports will not be triggered if the 5th key is a [*], such as when performing a GOTO or viewing capabilities of users. 												

General Rules on Authority Levels and changes

The following rules apply to users when making modifications within the system based on the user code authority levels:

- Master Codes and all lower level codes can be used interchangeably when performing system functions within a partition (a system armed with a user's temporary code can be disarmed with the Master Code or another user's temporary code), except the Operator Level C Code described above.
- A user may not delete or change the user code of the SAME or HIGHER authority than which he is assigned.
- A user (levels 0, 1 & 2 only) may only ADD users to a LOWER authority level.
- A user may assign other users access to only those partitions to which he himself has access.

- A user can only be DELETED or CHANGED from within the partition he is assigned.
- User numbers must be entered as 2-digit entries. Single digit user numbers must, therefore, always be preceded by a "0" (example, 03, 04, 05, etc.). Make sure the end user understands this requirement. Temporary codes are entered as 4-digit numbers.

Important!: Unless Ademco Contact ID reporting is used, only user codes #1–#15 can uniquely report to the central station using the communication formats provided. Users #16–#70 will report as User #15, if enabled for open/close reporting, for the other reporting formats.

Multiple Partition Access
Examples
(GOTO Function)

To make a partitioned environment particularly useful, the system must allow for certain people to have access to other partitions. This is particularly true in the Factory/Office environment where the president of the company wants access to any area of his company. The VISTA-40 has total flexibility in supporting this requirement. On a USER basis, each user is programmed for a base partition (the one he normally is assigned) and the other partition which he can be authorized to access.

In addition, within each partition, each USER may be programmed to have different levels of authority. For example, User #3, the V.P. of Engineering, could be assigned to work within the Engineering Department (Partition 1) of ABC Manufacturing. Since he needs the full capabilities in his area, he is assigned as a MASTER with Level 1 authority. This means he may Arm, Disarm, Bypass, Add or Modify users in partition 1. It is also a requirement that he be able to gain access to the manufacturing area (partition 2) on an emergency basis. You can set this up easily with the VISTA-40 by now requesting that he also be assigned to partition 2, with a level of authority set lower, such as Level 4 (OPERATOR Level B) which allows him to Arm and Disarm, but nothing else. The control will automatically assign him the next available user number within partition 2 and does not require reprogramming of his already existing 4 digit security code! This type of setup can be done for each user of the system and for any combination of up to 2 partitions.

EXAMPLE OF MULTIPLE PARTITION ACCESS

Part 1	Part 2
User 3	User 5
Level 1	Level 4
Master	Oper B

In the above example, User 3 has MASTER authority in partition 1 and OPERATOR B authority in partition 2. His user number in partition 2 is User 5 and his 4 digit code is the same for both partitions. If a user number is already being used in a partition, the system will automatically assign another, unused User number.

Assigning users to the other partition is one thing, but how about actually being a user and trying to "see" one of the other partitions? The VISTA-40 has developed a simple key sequence (code + [*] + partition number 0–2; partition 0 returns to the default partition for that keypad) for a user to go to another partition.

Once there, the current display becomes attached to that partition and status requests, etc., are now displayed for that partition, unless a period of 120 seconds elapses with no key entries. To return to your original partition, you may enter the same key sequence and end it with your normal partition number or "0". You're now back to where you started. It's that simple! You may view this operation as a big selector switch and you are at the switch at the keypad.

EXAMPLE:

User may be regularly assigned to partition 1. This would be the default display for this user, however he may "select" to go to partition 2 for example. (Assumes he has been programmed for access to partition 2.) The user enters his normal access code and the proper sequence to select another partition followed by the number 2 for partition 2. The display will now select partition 2 information for view and further action.

To ADD a Master, Manager or Operator code

Installer must program at least one Master code.

† Or Master or Manager code, but must be code with higher level of authority than the code being changed. (i.e. Master code can add a Manager or Operator level code, but cannot add another Master code; a Manager code can add an Operator level code, but cannot add a Master or another Manager code).

Important!: During user code entry, normal key depressions at other keypads in a partition will be ignored. However, panic key depression will cause an alarm and terminate user entry.

Note: User codes cannot be added by using the Phone Module. User codes must be added by using an alpha keypad only.

Enter Installer Code† + [8] + new User # (02-69) + new User's code
Keypad will prompt for the Authority Level for this user.

User Number = 03
Enter Auth.Level

Enter the level number as follows:
1 = Master (Arm, Disarm, Bypass, add or modify lower level users)
2 = Manager (Arm, Disarm, Bypass, add or modify lower level users)
3 = Operator Level A (Arm, Disarm, Bypass)
4 = Operator Level B (Arm, Disarm)
5 = Operator Level C (Arm, Disarm only if system armed with this code)
6 = Duress (Arm, Disarm, triggers silent panic alarm)
Keypad will then prompt for Open/Close reporting option for this user.

Open/Close Rep.?
0 = NO , 1 = YES

Press 0 (NO) or 1 (YES), depending on whether or not arming/disarming by this user will trigger opening & closing reports. This prompt appears only if the installer code is used to add a user.

RF Button ?
0=NO , 1=YES

If a 5800 series button transmitter has been enabled, and not assigned to a user, this prompt will appear.

Enter Button ZN #
(01-63)

If yes was given as the answer to the RF button question, the zone number for the button will be requested. Enter one of the zone numbers assigned to the button transmitter as AWAY, STAY or DISARM. The system will then assign any STAY, AWAY or DISARM buttons of the transmitter to this user number.

Multi-Access ?
0 = NO , 1 = YES

Press 0 (NO) or 1 (YES). If NO, the program exits this mode. If yes, the Keypad prompts for the Global Arm option for this user.

Global Arm ?
0 = NO , 1 = YES

Press 0 (NO) or 1 (YES), depending on whether or not this user will be allowed to arm more than one partition via Global Arm prompts (described in the KEYPAD FUNCTIONS section) .
If the Multi-Access option was selected for this user, the keypad now prompts for the user's access to the next partition.

Part. 2 – SHOP ?
0 = NO , 1 = YES

Press 0 (NO) or 1 (YES), depending on whether or not this user will have access to the displayed partition number. If NO, the keypad displays this prompt for the next partition number in sequence.

If YES, the keypad prompts for the following:

- User's authority level in the displayed partition (see Authority Level prompt above). Note that the user number in the displayed partition is automatically assigned.
- Open/Close option for this user in the displayed partition (see Open/Close prompt above).
- Global Arm option for this user in the displayed partition.

When both partitions have been displayed, the keypad will scroll through the partition(s) to which access has been assigned, and will display the user number, authority level, open/close and global arm options that were programmed for each partition the user was granted access. For example:

Part. 1 S WHSE
User 03 Auth=3G.

Note that the "G" following the authority level indicates that the global arm feature is enabled for this user in the displayed partition, and that the period at the end of the second line indicates open/close reporting is enabled for this user in the displayed partition. The "S" indicates the partition from which the user may be changed or deleted.

To CHANGE a Master,
Manager or Operator code

Enter Installer code[†] + [8] + User number (02-69) + new code for that user.

The system will detect that the user number is already assigned and will prompt if this is a new user. Press 0 (NO).

The system will then confirm that the change is allowed based on authorization level. If the user number is the same as the Installer's, the system will prompt for the new code to be reentered. This prevents accidentally changing a high level code.

[†] Or Master or Manager code, but must be code with higher level of authority than the code being changed. (i.e. Master code can change a Manager or Operator level code, but cannot change another Master code; a Manager code can change an Operator level code, but cannot change a Master or another Manager code).

To DELETE a Master,
Manager or Operator code

Enter Installer code[†] + [8] + User number (02-69) + Installer code

The system will prompt if this code should be deleted. Press 0 (NO) or 1 (YES).

If yes, that user's code will be removed from all partitions to which it had been assigned, and all authorization levels and other information about that user will be deleted. Note that a user can only be deleted from the partition in which it was first assigned, and can only be deleted by a user with a higher authority level. A user cannot delete himself.

[†] Or Master or Manager code, but must be code with higher level of authority than the code being deleted. (i.e. Master code can delete a Manager or Operator level code, but cannot delete another Master code; a Manager code can delete an Operator level code, but cannot delete a Master or another Manager code).

To EXIT The User Code
Entry Mode

Press either [*] or [#], or don't press any key for 10 seconds.

KEYPAD FUNCTIONS

General Information

The keypad allows the user to arm and disarm the system, and perform other system functions, such as bypassing zones, view messages from the central station and display zone descriptors. Zone and system conditions (alarm, trouble, bypass) are displayed in the Display Window.

When an alarm occurs, keypad sounding and external sounding will occur, and the zone(s) in alarm will be displayed on the keypad. Pressing any key will silence the keypad sounder for 10 seconds. Disarming the system will silence both keypad and external sounders. When the system is disarmed, any zones that were in an alarm condition during the armed period will be displayed (memory of alarm). To clear this display, simply repeat the disarm sequence (enter the security code and press the OFF key).

The keypads also feature chime annunciation, and 3 panic key pairs (for silent, audible, fire or personal emergency alarms) which can notify the central station of an alarm condition, if that service is connected.

NOTE: Throughout this manual, the term "alpha keypad" refers equally to the 6139 alpha keypad or 6139AV voice/alpha keypad.

Phone Module

Refer to the separate instructions supplied with the Phone Module for information concerning its operating procedures.

Important: The Phone Module **cannot** be used to add user codes in this system. User codes must be added by using an alpha keypad only.

Arming Functions

Note that if QUICK ARM is enabled (field *29), the [#] key can be pressed instead of entering the security code, for any of the arming procedures (Away, Stay, Instant, Maximum, etc.).

The following is a brief list of system commands. For detailed information concerning system functions, refer to the User's Manual.

Disarmed, Not Ready Before arming, the system must be in the READY condition (all zones must be intact). If the "NOT READY" message appears, press the READY [*] key to display faulted zones.

Arming Away Enter code + AWAY [2].

Arming Stay Enter code + STAY [3].

Arming Instant Enter code + INSTANT [7].

Arming Maximum Enter code + MAXIMUM [4].

Global Arming If enabled for the user, the keypad will display the following:

ARM ALL ?
0 = NO , 1 = YES

If NO, the keypad prompts for arming each partition individually. If YES, the system attempts to arm all partitions allowed by this user. If there are any faults (open doors, windows, etc.) the keypad will display them. See notes below. These faults must be corrected or the zone bypassed before arming will occur. When faults are corrected, repeat the arming procedure.

- Global Arming Notes:**
1. When using the Global Arm feature, if there are faults in any of the selected partitions, the system will enter a summary mode in which the faulted zones of all of the selected partitions will be displayed. These faults must be corrected or bypassed (code + BYPASS + [#] will attempt to bypass the faults in all of the selected partitions). This summary mode will end in approx. 120 seconds if no keys are pressed.
 2. If, when disarming the system using a Global Disarm, any of the selected partitions has a condition which would cause the keypad to beep (such as alarm memory or a trouble condition), the system will cause the keypad to beep and will enter a summary mode in which the alarm memory or trouble conditions of all of the selected partitions will be displayed. This mode will continue until either approx. 120 seconds elapses or a second disarm occurs which clears the beeping condition.
 3. Global arming cannot be performed from a wireless keypad or a non-alpha display keypad.

Disarming

Enter code + OFF [1].

Bypassing Zones Enter code + BYPASS [6] + zone number. To automatically bypass all faulted zones, use "Quick Bypass" method: Enter code + BYPASS + [#].

Chime Mode Enter code + CHIME [9]. To turn chime mode off, enter code + CHIME again.

SUMMARY OF ARMING MODES

Mode	Features For Each Arming Mode			
	Exit Delay	Entry Delay	Perimeter Armed	Interior Armed
AWAY	Yes	Yes	Yes	Yes
STAY	Yes	Yes	Yes	No
INSTANT	Yes	No	Yes	No
MAXIMUM	Yes	No	Yes	Yes

Access Control If programmed, one relay may be used for access control. To activate this relay, the user enters his user code + [0]. The designated relay will pulse for 2 seconds. Each partition can have its own output device. The trigger will occur on the device tied to the partition for the keypad on which the keys were pressed. The access control relay is programmed in partition-specific field 1*76.

Partition "GOTO" Commands Each keypad (and the 4285 Phone Module) is assigned a default (home) partition for display purposes, and will show only that partition's information. To see information for another partition, or perform system functions in another partition, use the GOTO command (code + [*] + partition number 0-2). The keypad will remain in the new partition until directed to go to another partition, or until 120 seconds has elapsed with no keypad activity.

For example: 4-1-4-0 + * + [1] = GOTO partition 1
 4-1-4-0 + * + [2] = GOTO partition 2
 4-1-4-0 + * + [0] = GOTO home partition (i.e. partition defined in device programming for this keypad)

View Capabilities Of A User (Alpha Keypads Only) The keypad will display the partitions that user is authorized for, the user number, and the authority level for all partitions authorized. Enter code + [*] + [*]. The user's capabilities in each authorized partition will typically be displayed as follows:

Part. 1 WHSE User 01 Auth.=1.

The user's Open/Close report capability is shown by the dot following the authority level. If Open/Close is not enabled for a user, the dot will not appear.

Viewing Downloaded Messages (Alpha Keypads Only) Users may occasionally receive messages on the keypad display from their installation company. When this occurs, the keypad will display "Message. Press 0 for 5 secs.". Instruct the user to press and hold the 0 key to display the central station's message. The system must be in the READY state to view these messages.

Using The Built-In User's Manual (Alpha Keypads Only) An abbreviated User's Manual is stored in the system's memory, and can be particularly useful to the end user if the printed User's Manual is not conveniently accessible when the user needs to perform a seldom used and unfamiliar system procedure. The Built-in User's Guide is displayed by simply pressing any of the function keys (e.g., OFF, AWAY, STAY, MAXIMUM, BYPASS, INSTANT, CODE, TEST, READY, #, and CHIME) for approximately 5 seconds and then releasing it. Abbreviated instructions relative to the key that has been pressed will then be displayed (2 lines of text are displayed at a time). This function operates in either the armed or the disarmed state.

Displaying Descriptors (Alpha Keypads Only) The Alpha Keypads can display all programmed descriptors, which is useful to the installer when checking entries, and can be helpful to the user when there is a need to identify zones. To display descriptors, the keypads must display a SYSTEM READY message. Press and hold the READY key until the built-in instructions for that key appear, then release the key. The zone descriptors will appear one at a time, for about 2-3 seconds each. For faster viewing, press the READY key to display the next descriptor in numerical order and so on. When all descriptors have been displayed, the Control will exit display mode. To exit display mode before all descriptors have been displayed, enter the security code and press the OFF key.

Panic Keys

There are three panic keys (or panic key pairs) that, if programmed, can be used to manually initiate alarms and send a report to the central station. Each key pair can be individually programmed for 24-Hour Silent, Audible or Auxiliary (Emergency) responses. The panic function is activated when the appropriate key is pressed (or key pair is pressed at the same time).

The panic functions are identified by the system as follows:

PANIC	Displayed as Zone	
A or [*] + [1]	95	For alpha keypads, these panic keys can also be programmed with an alpha descriptor.
C or [#] + [3]	96	
B or [*] + [#]	99	

Important: for the Panic functions to be of practical value, the system must be connected to a central station.

End User Relay Command Mode (#70 Mode)

The system allows users to activate relays/X-10 modules by keypad command using either the keypad or a telephone keypad (if phone module is used). The user will be prompted (either by keypad alpha display or phone module)

To activate relays from a keypad, enter 4-digit security code + [#] +70.

To activate relays using a telephone and phone module, first dial the 2-digit phone access code. When the system acknowledges the access, enter 4-digit security code + [#] + 70. The following prompts/voice responses will begin.

ENTER DEVICE NO.
00=QUIT 01

Voice: "ENTER DEVICE CODE NOW".

Enter the 2-digit number of the relay/X-10 module to be activated.

nn DEVICE IS OFF
HIT 0=OFF , 1=ON

Voice: "*voice descriptor* DEVICE nn ON/OFF. FOR *voice descriptor* ON, ENTER 1, FOR *voice descriptor* OFF, ENTER 0"

Press 1 or 2 to turn the device off or on respectively. "nn" represents the 2-digit relay/X-10 module number and *voice descriptor* is the relay voice descriptor programmed by the installer (see relay descriptor programming section).

nn DEVICE IS OFF
HIT THE "*" KEY

Voice: "*voice descriptor* DEVICE nn ON/OFF. TO EXIT, ENTER 00 NOW"

From a keypad, press [*] to continue. The ENTER DEVICE NO. prompt will appear.

From a telephone keypad, enter 00 to exit, or enter the next relay number to be programmed. The current on/off state of that relay will be annunciated as described above. Alternatively, if 6 seconds elapses with no key depression, the phone module will repeat the "ENTER DEVICE CODE NOW" message.

Trouble Conditions

The word "**CHECK**" on the Keypad's display, accompanied by a rapid "beeping" at the Keypad, indicates that there is a trouble condition in the system. The audible warning sound can be silenced by pressing any key. Instruct users to call for service immediately upon seeing any of the following messages.

"Check" Messages

Zones 88-91, 87, 93 and 97 can be assigned alpha descriptors

- "**CHECK**" with one or more zone descriptor(s) indicates that a problem exists with those zone(s). First, determine if the zone(s) displayed are intact and make them so if they are not. If the problem has been corrected, key an OFF sequence (Code plus OFF) to clear the display.
- "**CHECK 97**" indicates that a short exists on the Polling Loop and may eliminate some of the protection.
- "**CHECK**" accompanied by a numeric display of "88", "89", "90", or "91" indicates an RF Receiver problem.
- "**CHECK 87**" indicates an 4285 phone module problem.
- "**CHECK 93**" indicates an VIM voice interface module problem.
- "**COMM. FAILURE**" (alpha) or "**FC**" (fixed-word) at the Keypad indicates that a failure occurred in the telephone communication portion of your system.

Other Trouble Conditions

- "**LO BAT**" (alpha) or "**BAT**" (fixed-word) and a zone descriptor, and a once per minute beep at the Keypad indicates that a low battery condition exists in the wireless transmitter displayed. Silence the warning sound by pressing any key. "**SYSTEM LO BAT**" (alpha) or "**BAT**" with no zone number (fixed-word) indicates a low battery condition with the system's backup battery.
- "**RCVR SET UP ERROR**" (alpha) or "**E8**" (fixed-word) at the keypad indicates that the system has more RF zones programmed than the installed RF receiver can support. If this is not corrected, none of the zones in the system will be protected. If more RF zones are desired, use an appropriate Receiver that supports more zones (ex. 4281H, 5881H).
- "**MODEM COMM**" (alpha) or "**CC**" (fixed-word) indicates that the control is on-line with the remote computer and the control is not operating. Panel's response to alarm and trouble conditions will be delayed until on-line session is completed.

Power Failure

If the **POWER** indicator is off, and the message "**AC LOSS**" (alpha) or "**NO AC**" (fixed-word) is displayed, the Keypad is operating on battery power only. Check to see that your system's plug-in transformer has not been accidentally pulled out. Instruct the user to call a service representative immediately if AC power cannot be restored.

VIM VOICE INTERFACE MODULE OPERATOR FUNCTIONS

General Information

When an alarm occurs, the control sends a "listen-in will follow" message (Contact ID report code 606) to the central station after the alarm report has been completed, or it will wait 5 minutes for a callback from the central station with correct 4-digit Audio ID code if the AUTO CALLBACK feature is enabled. If the AUTO CALLBACK feature is disabled, the central station's digital receiver then holds the phone line for 1 minute, providing time for the operator to begin a 2-way voice session with the premises by pressing a command key (see Operator Commands table). The 6139AV keypads at the premises automatically activate their "listen" mode.

If the AUTO CALLBACK feature is enabled, the central station's digital receiver will hang up immediately after any alarm report is sent. The central station operator will now have 5 minutes in which to call back and enter a 4-digit Audio ID code (entry must take no longer than 90 seconds) to initiate a 2-way voice session. This should be used in systems where a digital receiver other than the Ademco 685 is used, or where the 685 Rev is lower than 4.6. If a 685 receiver with Rev 4.6 or higher is used, then either method can be used for 2-way voice initiation.

AUTO CALLBACK is recommended for dual reporting so that alarms can go to both primary and secondary before the 2-way session begins.

IMPORTANT: Central station telephones not rated to operate at 4 volts or less may not work properly with 2-way voice sessions if the 685 Digital Receiver remains on the same line during the session. Switching the 685 to another incoming line after connection of the 2-way voice session remedies this problem and allows the 685 to remain available for other alarm reports.

During a 2-way voice session, all keypad alarm and check sounds are silenced. External sirens connected to the control and/or relay module continue to sound until the central station operator presses a key (refer to the RELAY PROGRAMMING section).

NOTES:

1. If a fire alarm or panic alarm occurs during a 2-way voice session, the session in progress is terminated. The control dials in again to report the new alarm and a new 2-way voice session can begin.
2. During a 2-way voice session keypad alarm and check sounds are silenced. If an alarm occurs in another partition and VIM CHIME is disabled or set for "ALL" Mode, the keypads remain silenced, but the alarm is displayed at the keypads in that partition. If an alarm occurs in another partition and VIM CHIME is enabled, the keypads in the other partition sound the alarm unless set for "ALL" mode.
3. AUTO CALLBACK is initiated when the central station operator depresses [8] [8]. This suspends the 2-way voice session until the operator calls back within 5 minutes and enters the proper 4-digit ID code (field 1*59).

Note: If the operator makes a mistake in entering the proper 4-digit ID code, the operator just needs to re-enter the correct code. If after 5 minutes have elapsed without the central station callback, only a new alarm will initiate a new 2-way voice session.

Operator Commands

The following table summarizes the central station operator commands available. To perform a command, the operator simply presses the appropriate telephone key(s).

OPERATOR COMMANDS

Key	Function	Comments
1	Talk Mode (1 beep)	Operator can speak to persons on premises.
2	VOX Mode (2-way voice) (2 beeps)	Operator can both speak and listen to persons on premises.
3	Listen Mode (3 beeps)	Operator can listen to activity at the premises. Repeated depressions of "3" toggle keypad listening levels from high to medium to low to high, etc.
4	Select Next Keypad	The first keypad is keypad #1.
5	Select Keypad #2	
6	Select Keypad #3	
7	Extend timeout 90 secs	This allows more time for the operator to begin a session.
8 8	Disconnect with callback	The operator can choose to disconnect the session, but call back within 5 minutes.
9 9	Disconnect	This command terminates a session.
0	Return to Listen to All Mode	
*8 nn	Select Keypad nn (keypad No. 01-15)	Use this command to select any keypad. e.g. *803 selects keypad #3.
#	Reset and select Keypad #1	Returns session to Listen Mode

EVENT LOGGING

Event Logging Procedures

IMPORTANT: In order for time and date stamping to occur, the system's real-time clock must be set. Refer to the SETTING THE REAL TIME CLOCK section.

The system has the ability to record various events in a history log (100 event capacity) wherein each event is recorded in one of five categories (alarm, check, bypass, open & system), with the time and date of its occurrence (if real-time clock is set). The log may be viewed (Display Mode) using an alpha keypad.

NOTE: The VISTA-40 does not support event log printing.

EVENT LOG MODE COMMANDS
Display Mode (installer or master): Enter CODE + [#] + [6] + [0]
Clear Event Log (installer only): Enter CODE + [#] + [6] + [2]
To EXIT Event Log Mode: Press [*] at any time.

Programming

The system can be configured for the following event log activities:

- Specific categories of events can be selectively enabled (field 1*70).
- The time stamp can be set for either 12 or 24 hour formats (field 1*71).
- Set event log time/date report enable (fields 1*40 & 1*41).

Event Logging Display

After entering event log mode, the following will be displayed:

ENTER 0 = RECENT
1 = COMPLETE

The Event Log holds up to 100 events, and can display all events in a category (complete), or only those events in a category occurring since the last Clear Event Log command (recent). Note that once the Event Log is full, the oldest event will be erased upon logging of any new event. Press the desired display mode key, 0 or 1.

SCAN LOG BY PART
0=NO 1-2=PART #

The system allows viewing of any partition's event log. Enter the partition number for the partition whose events are to be displayed. Entering 0 (NO) will display all events that occurred in the system regardless of partition.

For display purposes, events are stored on a partition by partition basis (except system events), and are grouped into five categories as follows.

Use the [3] & [1] keys to scroll to the next or previous category screens respectively:

ALARM EVENT LOG
TYPE CCC UUU

Displays time/date for zones that have either caused an alarm or have been restored in selected partition.

CHECK EVENT LOG
TYPE CCC UUU

Displays time/date for zones that have caused a trouble or supervisory condition in selected partition.

BYPASS EVENT LOG
TYPE CCC UUU

Displays time/date for zones that have been bypassed in selected partition.

OP/CL EVENT LOG
TYPE CCC UUU

Displays time, date and user number for each arming and disarming of the system for the partition selected. Note that only those users enabled by the installer during "add a user" procedure will be logged.

SYSTEM EVENT LOG
TYPE CCC UUU

Displays time/date for system problems, such as AC Loss, communication failure, etc., regardless of partition.

ALL EVENT LOG
TYPE CCC UUU

Displays all categories of events in chronological order, from most recent to oldest.

To display the events in a particular category, press [8] at the desired category screen.

If in Display Mode, events will appear one at a time from the most recent to the oldest. Use the [1] key to display events backward in time (from recent to past). Use the [3] key to display events forward in time. The following is a typical display:

P2 01/01 12:02AM
BURGLARY C03

Shows burglary alarm occurred in zone 3 of partition 2, at 12:02AM on January 1.

After the last event in the selected category has been displayed, the system will automatically return to the next event category screen.

Clear Event Log

To clear the Event Log, enter installer code + [#] + [6] + [2]

The following will appear:

CLEAR EVENT LOG
0=NO 1=YES

Press [1] if Event Log is to be cleared from memory. All events in the log will still be displayed if the COMPLETE option is selected. Only those events occurring from the time of the CLEAR command will be displayed if RECENT display option is selected. Press [0] if event log is **not** to be cleared at this time.

If [1] is pressed, the following will appear:

ARE YOU SURE?
0=NO 1=YES

Press [1] if it is desired to clear the event log. Press [0] if event log is not to be cleared.

Screen Definitions

RECENT	Events since last CLEAR
COMPLETE	Displays all events
TYPE	Type of event (Burg., Fire, etc.)
CCC	Zone (contact) number
UUU	User number

Section 2. TESTING THE SYSTEM

- Using The Test Mode After the installation is completed, the Security System should be thoroughly tested on a partition by partition basis as follows:
1. With the System in the disarmed state, check that all zones are intact. If DISARMED - Press [*] to show faults is displayed, press the [*] key to display the descriptors of the faulted zone(s). Restore faulted zone(s) if necessary, so that ****DISARMED*** /READY TO ARM (Alpha keypads), or READY (Fixed-word keypads) is displayed.
 2. Enter the security code and press the TEST key. The external sounder (if used) should sound for 3 seconds and then turn off (the system is operating on the back-up battery only at this time).

NOTES:

- If the sounder does not sound, this may be an indication that the backup battery is discharged or missing.
- As a reminder that the system is in the Test mode, the Keypad will sound a single beep at 15-second intervals.
- In the Test mode, no alarm reports will be sent to the central station. Also, the external sounder (if used) will not be activated.

Doors and Windows Open and close each protected door and window in turn. Each action should produce three beeps from the Keypad. The descriptor for each protection zone will appear on the Keypad display.

Motion Detectors Walk in front of any interior motion detectors. Listen for three beeps when the detector senses movement. While it is activated, its descriptor will remain displayed on the Keypad. Note that wireless PIRs will have a 3 minute lockout between transmissions to conserve battery life (remove cover for walk test to override the 3-minute lock-out).

Smoke Detectors Follow the test procedure provided by the manufacturer of each smoke detector to ensure that all detectors are operational and are functioning properly.
NOTE: A 2-wire smoke detector display will not clear until the Test mode is exited.

Turning Off TEST mode

Enter the security code and press the OFF key.

Armed System Test **IMPORTANT!** A message will be sent to the central station during the following tests. Notify the central station that a test will be in progress.

NOTE: A display of "COMM. FAILURE" indicates a failure to communicate (no Kiss-off by the receiver at the central station after the maximum number of transmission attempts is tried). If this occurs, verify that the phone line is connected, the correct report format is programmed, etc.

1. Arm the system and fault one or more zones. Silence alarm sounder(s) each time by entering the code and pressing OFF. Check that Entry/Exit delay zones provide the assigned delay times.
2. Check the keypad-initiated alarms, if programmed in field *05, by pressing the programmed panic keys (or panic key pairs on some keypads)
 - A or [*] + [1] ALARM and 95 will be displayed
 - C or [#] + [3] ALARM and 96 will be displayed
 - B or [*] + [#] ALARM and 99 will be displayed

If the system has been programmed for audible emergency, the keypad will emit a loud, steady alarm sound. Silence the alarm by entering the security code and pressing OFF. If the system has been programmed for silent panic, there will be no audible alarms or displays. A report will be sent to the central station, however.

NOTE: A 2-way voice session will begin (if so programmed) during this test if any of the Panic keys are programmed to report to the central station.

3. Notify the central station that all tests are finished and verify results with them.

2-Way Voice Test Mode

At the Protected Premises: To test the VIM and 6139AV keypad 2-way voice operation, both the installer at the protected premises and the central station operator do the following.

NOTE: The VIM has built-in LEDs which identify its operating mode. It can be helpful to view these LEDs when performing the following test. To view the LEDs, remove the VIM's cover and refer to the table that follows.

VIM STATUS LED FUNCTIONS		
LED	STATE	MEANING
NO LED LIT	Off	VIM Idle
RED LIT	Steady	Talk to single keypad
	Flashing	Talk to All Mode
GREEN LIT	Steady	VOX Mode
BOTH LIT	Steady	Listen to single keypad
	Flashing in unison	Listen to All Mode
	Alternating Flash	Waiting for operator's callback ID code

1. The installer enters the security code and presses #65 at a 6139AV 2-way voice keypad.

The keypad displays "AUDIO 2WAY TEST" momentarily and a test message is sent to the central station, with a "listen-in to follow" message (a Callback will be required if in the Auto Callback mode).

The keypad then initially displays the "LISTEN MODE" message (if so programmed via "VIM TEXT" option). Subsequently, this message changes, depending on the 2-way voice mode the central station operator selects (step 1 of "At the Central Station" below), such as "LISTEN MODE" (3 beeps), "TALK MODE" (1 beep), or "VOX MODE" (2 beeps).

2. The installer can say something verbally to the central station operator from this keypad to confirm that the "listen-in" is working properly.
3. The installer should speak out loud near each of the 2-way voice keypads so the operator can confirm their operation.
4. The installer can adjust the "Talk Mode" audio level using the procedure described earlier.

At the Central Station:

1. When the test message and listen-in to follow message is received, the operator lifts the receiver to begin a 2-way voice session and presses a command key (see VIM OPERATOR FUNCTIONS section earlier in this manual). If Auto Callback option is chosen, the operator will have to call back within 5 minutes to begin a 2-way voice session.
The system defaults to "LISTEN MODE."

2. The operator should listen for the installer's verbal message. The operator can then switch to "TALK MODE" or "VOX MODE" and say something to the installer at the premises to confirm proper operation of these modes.
3. The operator should switch to each of the other installed 2-way voice keypads and listen for the installer's verbal message.
4. The operator can switch to "talk Mode" and speak while the installer adjusts the keypad's audio level.
5. In partitioned systems, repeat this test in each partition.

To test the operator-initiated callback feature and audio ID number, the operator can enter "88", hang up, and call back within 5 minutes and enter the proper ID code (field 1*59).

To end this test mode, the operator enters "99." This test mode also automatically ends after 90 seconds if no commands are issued.

Turning The System Over
To The User

1. Fully explain the operation of the system to the user by going over each of its functions as well as the User's Manual supplied.
2. In particular, explain the operation of each zone (entry/exit, perimeter, interior, fire, etc.). Be sure the user understands how to operate any emergency feature(s) programmed into the system.
IMPORTANT!: In the spaces provided in the User's Manual, record the Entry and Exit Delay times, and those functions that have been programmed into the available PANIC keys or key pairs.
3. Make sure the user understands the importance of testing the system at least weekly, following the procedure provided in the User's Manual.

TO THE INSTALLER

Regular maintenance and inspection (at least annually) by the installer and frequent testing by the user are vital to continuous satisfactory operation of any alarm system.

The installer should assume the responsibility of developing and offering a regular maintenance program to the user as well as acquainting the user with the proper operation and limitations of the alarm system and its component parts. Recommendations must be included for a specific program of frequent testing (at least weekly) to insure the system's proper operation at all times.

Section 3. SUMMARY OF SYSTEM COMMANDS

TYPES OF COMMANDS	DESIRED FUNCTION	PROCEDURE
Arming, Disarming And Silencing Commands	Arming Away Arming Stay Quick Arm	Enter User Code + AWAY [2] Enter User Code + STAY [3] Enter [#] instead of user code followed by AWAY [2] or STAY [3]
	Disarming Silencing	Enter User Code + OFF [1] Enter User Code OFF [1]
Bypassing Commands	Bypassing Zone	Enter User Code + BYPASS [6] + Zone Number To automatically bypass all faulted zones, use quick bypass
	Quick Bypass	Enter User Code + BYPASS [6] + [#]
User Code Edit Commands	Add User Code	Enter Your User Code + [8] + New User Number + New User Code (Installer, Master Or Manager User Only)
	Change User Code	Enter Your User Code + [8] + User Number To Change + New User Code (Installer, Master Or Manager User Only)
	Delete User Code	Enter Your User Code + [8] + User Number To Delete + Your User Code (Installer, Master Or Manager User Only)
	View User Capabilities	Enter User Code + [*] + [*]
Chime Mode Commands	Chime On Chime Off	Enter User Code + CHIME [9] Enter User Code + CHIME [9] Again
	Real Time Clock Commands	Setting/Viewing
System Test Commands	Burglary Walk Test 2-Way Audio Test	Enter User Code + TEST [5] Enter Installer's Code + [#] + 65
	Event Logging Commands	Display Log
Clear Log		Enter Installer's Code + [#] + 62
Program Mode And Download Commands	Enter Program Mode	Enter Installer's Code + [8] + 00
	Exit Program Mode	Enter *99 (No Lockout) Or *98 (Lockout)
	Site Initiated Download	Enter Installer's Code + [#] + [1]
Scheduling Related Commands	Edit Open/Close Windows	Enter Installer's Code + [#] + 80
	Edit Temporary Schedules	Enter User Code + [#] + 81
	Delay Closing Time	Enter User Code + [#] + 82
	Edit User Timer Schedules	Enter User Code + [#] + 83
Miscellaneous Relay Commands	Trip Access Door Relay	Enter User Code + [0] (when 4204 relay programmed for this)
	Turn Relay On/Off	Enter User Code + [#] + 71 or 72 (when 4204 relay programmed for one of these)
Miscellaneous User Commands	GOTO Group #X	Enter User Code + [*] + Partition Number (0-2) (using 0 returns to home group)
	User Self Help	Press Desired Function Key For 5 Seconds (displays help for that function key)
	View Zone Descriptors	Press [*] Key For 5 Seconds (scrolls zone descriptors one at a time)

Wireless System	House Id Sniffer Mode = Code + [#] + [2] (installer only) Transmitter ID Test = Code + [#] + [3] (installer only) Go/No Go Test = Code + TEST [5] Key)
Keypad Functions	Arming Away: Enter Code + Away [2]. Arming Stay: Enter Code + Stay [3]. Arming Instant: Enter Code + Instant [7]. Arming Maximum: Enter Code + Maximum [4]. Quick Arm: Use # Key Instead Of User Code Followed By Any Of The Above Arming Mode Keys. Global Arming: If Enabled For The User, The Keypad Will Display a Prompt. Answer The Prompted Questions. Disarming: Enter Code + Off [1]. Bypassing Zones: Enter Code + Bypass [6] + Zone Number To Automatically Bypass All Faulted Zones, Use "Quick Bypass" Method. Quick Bypass: Enter Code + Bypass + [#]. Chime Mode: Enter Code + Chime [9]. To Turn Chime Mode Off, Enter Code + Chime [9] Again. Partition GOTO: User Code + [*] + Partition Number 1–2 GOTO Home Partition: User Code + [*] + [0] Panic: [*] + [1] Zone 95 (or A Key) [*] + [#] Zone 99 (or B Key) [#] + [3] Zone 96 (or C Key) View Downloaded Messages = Press [0] For 5 Seconds Display All Zone Descriptors = Press [*] For 5 Seconds Display User Self-Help = Hold Any Key For 5 Seconds
Programming Commands	Site Initiated Download = User Code + [#] + [1] Direct Wire Download Enable = User Code + [#] + [5] Enter Program Mode = Installer Code + 8 0 0 Exit Program Mode = *99 or *98

Section 4. REGULATORY AGENCY STATEMENTS

UL INSTALLATION REQUIREMENTS

The following requirements apply to UL Residential Burglary installations:

1. All partitions must be owned and managed by the same person(s).
2. All partitions must be part of one building at one street address.
3. The audible alarm device(s) must be placed where it/they can be heard by all partitions.
4. The Control cabinet must be protected from unauthorized access. This can be done by installing a tamper switch on the cabinet door (not supplied with VISTA-40) or by installing a UL Listed passive infrared detector positioned to detect cabinet access. Wire the selected device to any EOLR supervised zone (zone 1-8). Program this zone for day trouble/night alarm (type 05) or 24 hour audible alarm (type 07) response. The 24 hour alarm response must be used for multiple partitioned systems.
5. Remote Downloading and auto-disarming are not UL Listed features.

FEDERAL COMMUNICATIONS COMMISSION (FCC) STATEMENT

This equipment has been tested to FCC requirements and has been found acceptable for use. The FCC requires the following statement for your information:

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- If using an indoor antenna, have a quality outdoor antenna installed.
- Reorient the receiving antenna until interference is reduced or eliminated.
- Move the receiver away from the control/communicator.
- Move the antenna leads away from any wire runs to the control/communicator.
- Plug the control/communicator into a different outlet so that it and the receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions.

The user or installer may find the "Interference Handbook" booklet prepared by the Federal Communications Commission helpful. This booklet is available from the U.S. Government Printing Office, Washington, DC 20402.

The user shall not make any changes or modifications to the equipment unless authorized by the Installation Instructions or User's Manual. Unauthorized changes or modifications could void the user's authority to operate the equipment.

FCC PART 68 NOTICE

This equipment complies with Part 68 of the FCC rules. On the front cover of this equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

This equipment uses the following jacks:

An RJ31X is used to connect this equipment to the telephone network.

The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to determine the maximum REN for the calling area.

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe necessary.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

If trouble is experienced with this equipment, please contact the manufacturer for repair and warranty information. If the trouble is causing harm to the telephone network, the telephone company may request you remove the equipment from the network until the problem is resolved.

There are no user serviceable components in this product, and all necessary repairs must be made by the manufacturer. Other repair methods may invalidate the FCC registration on this product.

This equipment cannot be used on telephone company-provided coin service. Connection to Party Line Service is subject to state tariffs.

This equipment is hearing-aid compatible.

When programming or making test calls to an emergency number, briefly explain to the dispatcher the reason for the call. Perform such activities in the off-peak hours; such as early morning or late evening.

IN THE EVENT OF TELEPHONE OPERATIONAL PROBLEMS

In the event of telephone operational problems, disconnect the control panel by removing the plug from the RJ31X (CA38A in Canada) wall jack. We recommend that you demonstrate disconnecting the phones on installation of the system. Do not disconnect the phone connection inside the Control Panel. Doing so will result in the loss of your phone lines. If the regular phone works correctly after the Control Panel has been disconnected from the phone lines, the Control Panel has a problem and should be returned for repair. If upon disconnection of the Control Panel, there is still a problem on the line, notify the telephone company that they have a problem and request prompt repair service. The user may not under any circumstances (in or out of warranty) attempt any service or repairs to the system. It must be returned to the factory or an authorized service agency for all repairs.

**CANADIAN DEPARTMENT OF COMMUNICATIONS
(DOC) STATEMENT**

NOTICE

The Canadian Department of Communications label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution: User should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

The Load Number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a telephone loop which is used by the device, to prevent overloading. The termination on a loop may consist of any combination of devices subject only to the requirement that the total of the Load Numbers of all the devices does not exceed 100.

AVIS

L'étiquette du ministère des Communications du Canada identifie le matériel homologué. Cette étiquette certifie que le matériel est conforme à certaines normes de protection, d'exploitation et de sécurité des réseaux de télécommunications. Le ministère n'assure toutefois pas que le matériel fonctionnera à la satisfaction de l'utilisateur.

Avant d'installer ce matériel, l'utilisateur doit s'assurer qu'il est permis de le raccorder aux installations de l'entreprise locale de télécommunications. Le matériel doit également être installé en suivant une méthode acceptée de raccordement. Dans certains cas, les fils intérieurs de l'entreprise utilisés pour un service individuel à la ligne unique peuvent être prolongés au moyen d'un dispositif homologué de raccordement (cordon prolongateur téléphonique interne). L'abonné ne doit pas oublier qu'il est possible que la conformité aux conditions énoncées ci-dessus n'empêche pas la dégradation du service dans certaines situations. Actuellement, les entreprises de télécommunications ne permettent pas que l'on raccorde leur matériel aux prises d'abonnés, sauf dans les cas précis prévus par les tarifs particuliers de ces entreprises.

Les réparations du matériel homologué doivent être effectuées pas un centre d'entretien canadien autorisé désigné par le fournisseur. La compagnie de télécommunications peut demander à l'utilisateur de débrancher un appareil à la suite de réparations ou de modifications effectuées par l'utilisateur ou à cause de mauvais fonctionnement.

Pour sa propre protection, l'utilisateur doit s'assurer que tous les fils de mise en terre de la source d'énergie électrique, des lignes téléphoniques de réseau de conduites d'eau s'il y en a, soient raccordés ensemble. Cette précaution est particulièrement importante dans les régions rurales.

Avertissement: L'utilisateur ne doit pas tenter de faire ces raccordements lui-même; il doit avoir recours à un service d'inspection des installations électriques, ou à un électricien, selon le cas.

L'indice de charge (IC) assigné à chaque dispositif terminal pour éviter toute surcharge indique le pourcentage de la charge totale qui peut être raccordé à un circuit téléphonique bouclé utilisé par ce dispositif. La terminaison du circuit bouclé peut être constituée de n'importe quelle combinaison de dispositifs, pourvu que la somme des indices de charge de l'ensemble des dispositifs ne dépasse pas 100.

DIP SWITCH TABLES FOR ADDRESSABLE POLLING LOOP DEVICES

4208 ZONE EXPANDER

SHOWN SET FOR ID 10 (A)

POS.1: LOOPS 1 & 2
RESPONSE TIME:
W/TABLE FAST SLOW
A UP DN
B DN UP

4192D/4192SDT/4192CP SMOKE DETECTORS

APPLIES TO TABLE A UPLY
SHOWN SET FOR ID 10

POS.1: MUST BE DOWN

4190WH ZONE EXPANDER

APPLIES TO TABLE A & B UPLY
SHOWN SET FOR ID 10 (A)

WITH TABLE: A B
POS.1 MUST BE: DN UP

THIS TABLE FOR DIPS WITH WORD "DN" ("—" = DN)

DEVICE ID	DIP SWITCH POSITION			
	2	3	4	5
10-16	—	—	—	UP
17-24	—	—	UP	—
25-32	—	—	UP	UP
33-40	—	UP	—	—
41-48	—	UP	—	UP
49-56	—	UP	UP	—
57-64	—	UP	UP	UP

THIS TABLE FOR DIPS WITH WORD "DN" ("—" = OFF)

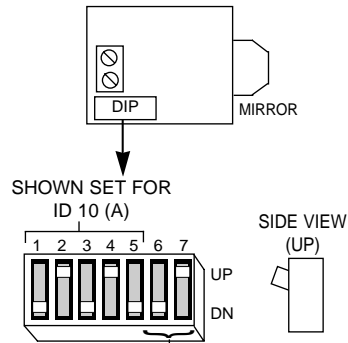
DEVICE ID	DIP SWITCH POSITION							
	2	3	4	5	6	7	8	
10	—	—	—	UP	—	UP	—	—
11	—	—	—	UP	—	UP	UP	—
12	—	—	—	UP	UP	—	—	—
13	—	—	—	UP	UP	—	UP	—
14	—	—	—	UP	UP	UP	—	—
15	—	—	—	UP	UP	UP	UP	—
16	—	—	UP	—	—	—	—	—
17	—	—	UP	—	—	—	UP	—
18	—	—	UP	—	—	UP	—	—
19	—	—	UP	—	—	UP	UP	—
20	—	—	UP	—	UP	—	—	—
21	—	—	UP	—	UP	—	UP	—
22	—	—	UP	—	UP	UP	—	—
23	—	—	UP	—	UP	UP	UP	—
24	—	—	UP	UP	—	—	—	—
25	—	—	UP	UP	—	—	UP	—
26	—	—	UP	UP	—	UP	—	—
27	—	—	UP	UP	—	UP	UP	—
28	—	—	UP	UP	UP	—	—	—
29	—	—	UP	UP	UP	—	UP	—
30	—	—	UP	UP	UP	UP	—	—
31	—	—	UP	UP	UP	UP	UP	—
32	—	UP	—	—	—	—	—	—
33	—	UP	—	—	—	—	UP	—
34	—	UP	—	—	—	UP	—	—
35	—	UP	—	—	—	UP	UP	—
36	—	UP	—	—	UP	—	—	—
37	—	UP	—	—	UP	—	UP	—
38	—	UP	—	—	UP	UP	—	—
39	—	UP	—	—	UP	UP	UP	—
40	—	UP	—	UP	—	—	—	—
41	—	UP	—	UP	—	—	UP	—
42	—	UP	—	UP	—	UP	—	—
43	—	UP	—	UP	—	UP	UP	—
44	—	UP	—	UP	UP	—	—	—
45	—	UP	—	UP	UP	—	UP	—
46	—	UP	—	UP	UP	UP	—	—
47	—	UP	—	UP	UP	UP	UP	—
48	—	UP	UP	—	—	—	—	—
49	—	UP	UP	—	—	—	UP	—
50	—	UP	UP	—	—	UP	—	—
51	—	UP	UP	—	—	UP	UP	—
52	—	UP	UP	—	UP	—	—	—
53	—	UP	UP	—	UP	—	UP	—
54	—	UP	UP	—	UP	UP	—	—
55	—	UP	UP	—	UP	UP	UP	—
56	—	UP	UP	UP	—	—	—	—
57	—	UP	UP	UP	—	—	UP	—
58	—	UP	UP	UP	—	UP	—	—
59	—	UP	UP	UP	—	UP	UP	—
60	—	UP	UP	UP	UP	—	—	—
61	—	UP	UP	UP	UP	—	UP	—
62	—	UP	UP	UP	UP	UP	—	—
63	—	UP	UP	UP	UP	UP	UP	—
64	UP	—	—	—	—	—	—	—
BIT VALUE:	64	32	16	8	4	2	1	

THIS TABLE FOR DIPS WITH WORD "UP" ("—" = OFF)

DEVICE ID	DIP SWITCH POSITION							
	2	3	4	5	6	7	8	
10	UP	UP	UP	—	UP	—	UP	—
11	UP	UP	UP	—	UP	—	—	—
12	UP	UP	UP	—	—	UP	UP	—
13	UP	UP	UP	—	—	—	UP	—
14	UP	UP	UP	—	—	—	—	UP
15	UP	UP	UP	—	—	—	—	—
16	UP	UP	—	UP	UP	UP	UP	—
17	UP	UP	—	UP	UP	UP	—	—
18	UP	UP	—	UP	UP	—	UP	—
19	UP	UP	—	UP	—	UP	UP	—
20	UP	UP	—	UP	—	UP	UP	—
21	UP	UP	—	UP	—	UP	—	UP
22	UP	UP	—	UP	—	—	UP	—
23	UP	UP	—	UP	—	—	—	—
24	UP	UP	—	—	UP	UP	UP	—
25	UP	UP	—	—	UP	UP	—	—
26	UP	UP	—	—	UP	—	UP	—
27	UP	UP	—	—	UP	—	—	—
28	UP	UP	—	—	—	UP	UP	—
29	UP	UP	—	—	—	UP	—	—
30	UP	UP	—	—	—	—	UP	—
31	UP	UP	—	—	—	—	—	—
32	UP	—	UP	UP	UP	UP	UP	—
33	UP	—	UP	UP	UP	UP	—	—
34	UP	—	UP	UP	UP	—	UP	—
35	UP	—	UP	UP	UP	—	—	—
36	UP	—	UP	UP	—	UP	UP	—
37	UP	—	UP	UP	—	UP	—	—
38	UP	—	UP	UP	—	—	UP	—
39	UP	—	UP	UP	—	—	—	—
40	UP	—	UP	—	UP	UP	UP	—
41	UP	—	UP	—	UP	UP	—	—
42	UP	—	UP	—	UP	—	UP	—
43	UP	—	UP	—	UP	—	—	—
44	UP	—	UP	—	—	UP	UP	—
45	UP	—	UP	—	—	UP	—	—
46	UP	—	UP	—	—	—	UP	—
47	UP	—	UP	—	—	—	—	—
48	UP	—	—	UP	UP	UP	UP	—
49	UP	—	—	UP	UP	UP	—	—
50	UP	—	—	UP	UP	—	UP	—
51	UP	—	—	UP	UP	—	—	—
52	UP	—	—	UP	—	UP	UP	—
53	UP	—	—	UP	—	UP	—	—
54	UP	—	—	UP	—	—	UP	—
55	UP	—	—	UP	—	—	—	—
56	UP	—	—	—	UP	UP	UP	—
57	UP	—	—	—	UP	UP	—	—
58	UP	—	—	—	UP	—	UP	—
59	UP	—	—	—	UP	—	—	—
60	UP	—	—	—	—	UP	UP	—
61	UP	—	—	—	—	UP	—	—
62	UP	—	—	—	—	—	UP	—
63	UP	—	—	—	—	—	—	—
64	—	UP	UP	UP	UP	UP	UP	—
BIT VALUE:	64	32	16	8	4	2	1	

DIP SWITCH TABLES FOR POLLING LOOP DEVICES

4275 PIR

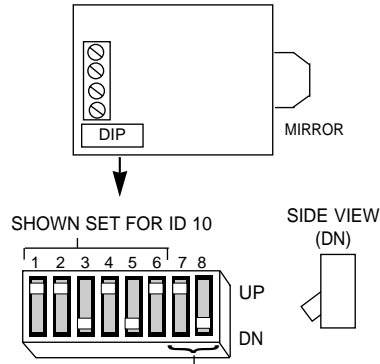


SHOWN SET FOR ID 10 (A)

POS 6: UP (A), DN (B) = INST. MODE
DN (A), UP (B) = PULSE COUNT

POS. 7: UP (A), DN (B) = WALK TEST
DN (A), UP (B) = W/T DISABLE

4278 PIR

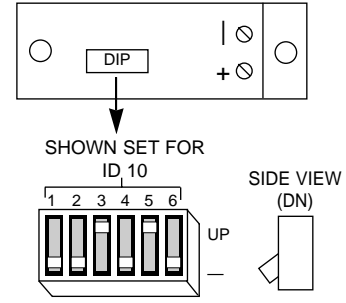


SHOWN SET FOR ID 10

POS 7: UP = NORMAL MODE
DN = INSTANT MODE

POS. 8: UP = W/T DISABLE
DN = WALK TEST

4194 REED CONTACT (SURFACE MOUNT)



SHOWN SET FOR ID 10

THIS TABLE FOR DIPS WITH WORD "OFF" **A**

DEVICE ID	DIP SWITCH POSITION				
	1	2	3	4	5
10	—	UP	—	UP	—
11	—	UP	—	UP	UP
12	—	UP	UP	—	—
13	—	UP	UP	—	UP
14	—	UP	UP	UP	—
15	—	UP	UP	UP	UP
16	UP	—	—	—	—
17	UP	—	—	—	UP
18	UP	—	—	UP	—
19	UP	—	—	UP	UP
20	UP	—	UP	—	—
21	UP	—	UP	—	UP
22	UP	—	UP	UP	—
23	UP	—	UP	UP	UP
24	UP	UP	—	—	—
25	UP	UP	—	—	UP
26	UP	UP	—	UP	—
27	UP	UP	—	UP	UP
28	UP	UP	UP	—	—
29	UP	UP	UP	—	UP
30	UP	UP	UP	UP	—
31	UP	UP	UP	UP	UP

THIS TABLE FOR DIPS WITH WORD "ON" **B**

DEVICE ID	DIP SWITCH POSITION				
	1	2	3	4	5
10	UP	—	UP	—	UP
11	UP	—	UP	—	—
12	UP	—	—	UP	UP
13	UP	—	—	UP	—
14	UP	—	—	UP	—
15	UP	—	—	—	—
16	—	UP	UP	UP	UP
17	—	UP	UP	UP	—
18	—	UP	UP	—	UP
19	—	UP	UP	—	—
20	—	UP	—	UP	UP
21	—	UP	—	UP	—
22	—	UP	—	—	UP
23	—	UP	—	—	—
24	—	—	UP	UP	UP
25	—	—	UP	UP	—
26	—	—	UP	—	UP
27	—	—	UP	—	—
28	—	—	—	UP	UP
29	—	—	—	UP	—
30	—	—	—	—	UP
31	—	—	—	—	—

BIT VALUE: 16 8 4 2 1

DEVICE ID	DIP SWITCH POSITION					
	1	2	3	4	5	6
10	UP	UP	—	UP	—	UP
11	UP	UP	—	UP	—	—
12	UP	UP	—	—	UP	UP
13	UP	UP	—	—	UP	—
14	UP	UP	—	—	—	UP
15	UP	UP	—	—	—	—
16	UP	—	UP	UP	UP	UP
17	UP	—	UP	UP	UP	—
18	UP	—	UP	UP	—	UP
19	UP	—	UP	UP	—	—
20	UP	—	UP	—	UP	UP
21	UP	—	UP	—	UP	—
22	UP	—	UP	—	—	UP
23	UP	—	UP	—	—	—
24	UP	—	—	UP	UP	UP
25	UP	—	—	UP	UP	—
26	UP	—	—	UP	—	UP
27	UP	—	—	UP	—	—
28	UP	—	—	—	UP	UP
29	UP	—	—	—	UP	—
30	UP	—	—	—	—	UP
31	UP	—	—	—	—	—
32	—	UP	UP	UP	UP	UP
33	—	UP	UP	UP	UP	—
34	—	UP	UP	UP	—	UP
35	—	UP	UP	UP	—	—
36	—	UP	UP	—	UP	UP
37	—	UP	UP	—	UP	—
38	—	UP	UP	—	—	UP
39	—	UP	UP	—	—	—
40	—	UP	—	UP	UP	UP
41	—	UP	—	UP	UP	—
42	—	UP	—	UP	—	UP
43	—	UP	—	UP	—	—
44	—	UP	—	—	UP	UP
45	—	UP	—	—	UP	—
46	—	UP	—	—	—	UP
47	—	UP	—	—	—	—
48	—	—	UP	UP	UP	UP
49	—	—	UP	UP	UP	—
50	—	—	UP	UP	—	UP
51	—	—	UP	UP	—	—
52	—	—	UP	—	UP	UP
53	—	—	UP	—	UP	—
54	—	—	UP	—	—	UP
55	—	—	UP	—	—	—
56	—	—	—	UP	UP	UP
57	—	—	—	UP	UP	—
58	—	—	—	UP	—	UP
59	—	—	—	UP	—	—
60	—	—	—	—	UP	UP
61	—	—	—	—	UP	—
62	—	—	—	—	—	UP
63	—	—	—	—	—	—

BIT VALUE: 32 16 8 4 2 1

DEVICE ID	DIP SWITCH POSITION					
	1	2	3	4	5	6
10	—	—	UP	—	UP	—
11	—	—	UP	—	UP	UP
12	—	—	UP	UP	—	—
13	—	—	UP	UP	—	UP
14	—	—	UP	UP	UP	—
15	—	—	UP	UP	UP	UP
16	—	UP	—	—	—	—
17	—	UP	—	—	—	UP
18	—	UP	—	—	UP	—
19	—	UP	—	—	UP	UP
20	—	UP	—	UP	—	—
21	—	UP	—	UP	—	UP
22	—	UP	—	UP	UP	—
23	—	UP	—	UP	UP	UP
24	—	UP	UP	—	—	—
25	—	UP	UP	—	—	UP
26	—	UP	UP	—	UP	—
27	—	UP	UP	—	UP	UP
28	—	UP	UP	UP	—	—
29	—	UP	UP	UP	—	UP
30	—	UP	UP	UP	UP	—
31	—	UP	UP	UP	UP	UP
32	UP	—	—	—	—	—
33	UP	—	—	—	—	UP
34	UP	—	—	—	UP	—
35	UP	—	—	—	UP	UP
36	UP	—	—	UP	—	—
37	UP	—	—	UP	—	UP
38	UP	—	—	UP	UP	—
39	UP	—	—	UP	UP	UP
40	UP	—	UP	—	—	—
41	UP	—	UP	—	—	UP
42	UP	—	UP	—	UP	—
43	UP	—	UP	—	UP	UP
44	UP	—	UP	UP	—	—
45	UP	—	UP	UP	—	UP
46	UP	—	UP	UP	UP	—
47	UP	—	UP	UP	UP	UP
48	UP	UP	—	—	—	—
49	UP	UP	—	—	—	UP
50	UP	UP	—	—	UP	—
51	UP	UP	—	—	UP	UP
52	UP	UP	—	UP	—	—
53	UP	UP	—	UP	—	UP
54	UP	UP	—	UP	UP	—
55	UP	UP	—	UP	UP	UP
56	UP	UP	UP	—	—	—
57	UP	UP	UP	—	—	UP
58	UP	UP	UP	—	UP	—
59	UP	UP	UP	—	UP	UP
60	UP	UP	UP	UP	—	—
61	UP	UP	UP	UP	—	—
62	UP	UP	UP	UP	UP	—
63	UP	UP	UP	UP	UP	UP

BIT VALUE: 32 16 8 4 2 1

DIP SWITCH TABLES FOR 5700 SERIES WIRELESS DEVICES

HOUSE ID SWITCH SETTING FOR ALL DEVICES EXCEPT 5716

DEVICE ID	DIP SWITCH POSITION				
	1	2	3	4	5
1	UP	UP	UP	UP	—
2	UP	UP	UP	—	UP
3	UP	UP	UP	—	—
4	UP	UP	—	UP	UP
5	UP	UP	—	—	UP
6	UP	UP	—	—	UP
7	UP	—	UP	—	—
8	UP	—	UP	UP	UP
9	UP	—	—	UP	—
10	UP	—	UP	—	UP
11	UP	—	—	—	—
12	UP	—	—	UP	UP
13	UP	—	—	UP	—
14	UP	—	—	—	UP
15	UP	—	—	—	—
16	—	UP	UP	UP	UP
17	—	UP	UP	UP	—
18	—	UP	UP	—	UP
19	—	UP	UP	—	—
20	—	UP	—	UP	UP
21	—	UP	—	—	UP
22	—	UP	—	—	UP
23	—	—	—	—	—
24	—	—	UP	UP	UP
25	—	—	UP	UP	—
26	—	—	UP	—	UP
27	—	—	UP	—	—
28	—	—	—	UP	UP
29	—	—	—	UP	—
30	—	—	—	—	UP
31	—	—	—	—	—

BIT VALUE: 16 8 4 2 1

5701 PANIC TRANSMITTER

HOUSE ID (1 SHOWN)

POS. 6 UP = XMTR ID 62
DN = XMTR ID 63

5706/5707 SMOKE DETECTOR/TRANSMITTER

HOUSE ID (1 SHOWN)

XMTR ID (48 SHOWN)

XMTR ID	DIP SWITCH POSITION		
	6	7	8
48	UP	UP	UP
49	UP	UP	—
50	UP	—	UP
51	UP	—	—
52	—	UP	UP
53	—	UP	—
54	—	—	UP
55	—	—	—

5775 PIR DETECTOR/TRANSMITTER

HOUSE ID (1 SHOWN)

XMTR ID (32 SHOWN)

UP = PULSE COUNT
— = INST. MODE

XMTR ID	DIP SWITCH POSITION			
	6	7	8	9
32	UP	UP	UP	UP
33	UP	UP	UP	—
34	UP	UP	—	UP
35	UP	UP	—	—
36	UP	—	UP	UP
37	UP	—	UP	—
38	UP	—	—	UP
39	UP	—	—	—
40	—	UP	UP	UP
41	—	UP	UP	—
42	—	UP	—	UP
43	—	UP	—	—
44	—	—	UP	UP
45	—	—	UP	—
46	—	—	—	UP
47	—	—	—	—

5727 KEYPAD

HOUSE ID (1 SHOWN)

XMTR ID FIXED AT "00"

5715 UNIVERSAL TRANSMITTER

HOUSE ID (1 SHOWN)

POS. 1: UP = NORMAL RESPONSE
DN = FAST RESPONSE
POS. 2: UP = NO COVER TAMPER
DN = COVER TAMPER (use N.C. setting)

5711/5711WM DOOR/WINDOW TRANSMITTER

HOUSE ID (1 SHOWN)

XMTR ID (33 SHOWN)

POS. 12: UP = N.O.
— = N.C.
(Avoid ID 32-37 with N.O.)

XMTR ID	DIP SWITCH POSITION					
	6	7	8	9	10	11
33	—	UP	UP	UP	UP	—
34	—	UP	UP	UP	—	UP
35	—	UP	UP	—	UP	UP
36	—	UP	UP	—	—	UP
37	—	UP	—	—	UP	UP
38	—	UP	UP	—	—	UP
39	—	UP	UP	—	—	—
40	—	UP	—	UP	UP	UP
41	—	UP	—	UP	UP	—
42	—	UP	—	UP	—	UP
43	—	UP	—	—	UP	—
44	—	UP	—	—	UP	UP
45	—	UP	—	—	—	UP
46	—	UP	—	—	—	UP
47	—	UP	—	—	—	—
48	—	—	UP	UP	UP	UP
49	—	—	UP	UP	UP	—
50	—	—	UP	UP	—	UP
51	—	—	UP	UP	—	—
52	—	—	UP	—	UP	UP
53	—	—	UP	—	UP	—
54	—	—	UP	—	—	UP
55	—	—	UP	—	—	—
56	—	—	—	UP	UP	UP
57	—	—	—	UP	UP	—
58	—	—	—	UP	—	UP
59	—	—	—	UP	—	—
60	—	—	—	—	UP	UP
61	—	—	—	—	UP	—
62	—	—	—	—	—	UP
63	—	—	—	—	—	—

BIT VALUE: 32 16 8 4 2 1

5716 DOOR/WINDOW TRANSMITTER

IMPORTANT SET SWITCHES WITH BATTERY REMOVED

HOUSE ID (1 SHOWN)

XMTR ID (33 SHOWN)

POS. 6: UP = N.O.
DN = N.C.

TRANSMITTER ID	DIP SWITCH POSITION					
	6	5	4	3	2	1
1	—	UP	UP	UP	UP	UP
2	UP	—	UP	UP	UP	UP
3	—	—	UP	UP	UP	UP
4	UP	UP	—	UP	UP	UP
5	—	UP	—	UP	UP	UP
6	UP	—	—	UP	UP	UP
7	—	—	—	UP	UP	UP
8	UP	UP	—	UP	UP	UP
9	—	UP	—	UP	UP	UP
10	UP	—	UP	—	UP	UP
11	—	—	UP	—	UP	UP
12	UP	UP	—	—	UP	UP
13	—	UP	—	—	UP	UP
14	UP	—	—	—	UP	UP
15	—	UP	—	—	UP	UP
16	UP	UP	UP	UP	UP	UP
17	UP	UP	UP	UP	UP	UP
18	UP	—	UP	UP	—	UP
19	—	—	UP	UP	—	UP
20	UP	UP	—	UP	—	UP
21	—	UP	—	UP	—	UP
22	UP	—	—	UP	—	UP
23	—	—	—	UP	—	UP
24	UP	UP	—	—	UP	UP
25	UP	UP	—	—	—	UP
26	UP	—	UP	—	—	UP
27	—	—	UP	—	—	UP
28	UP	UP	—	—	—	UP
29	—	UP	—	—	—	UP
30	UP	—	—	—	—	UP
31	—	—	—	—	—	UP
32	UP	UP	UP	UP	UP	—
33	UP	UP	UP	UP	UP	—
34	UP	—	UP	UP	UP	—
35	—	—	UP	UP	UP	—
36	UP	UP	—	UP	UP	—
37	—	UP	—	UP	UP	—
38	UP	—	—	UP	UP	—
39	—	—	—	UP	UP	—
40	UP	UP	—	UP	UP	—
41	—	UP	UP	—	UP	—
42	—	UP	—	UP	UP	—
43	UP	—	UP	—	UP	—
44	UP	UP	—	—	UP	—
45	—	UP	—	—	UP	—
46	UP	—	—	—	UP	—
47	—	—	—	—	UP	—
48	UP	UP	UP	UP	UP	—
49	—	UP	UP	UP	UP	—
50	UP	—	UP	UP	UP	—
51	—	—	UP	UP	UP	—
52	UP	UP	—	UP	UP	—
53	—	UP	—	UP	UP	—
54	UP	—	—	UP	UP	—
55	—	—	—	UP	UP	—
56	UP	UP	UP	—	—	—
57	—	UP	UP	—	—	—
58	UP	—	UP	—	—	—
59	—	UP	UP	—	—	—
60	UP	UP	UP	—	—	—
61	UP	UP	—	—	—	—
62	UP	—	—	—	—	—
63	—	—	—	—	—	—

BIT VALUE: 1 2 4 8 16 32

For 5700 series transmitters not shown in this table, refer to the instructions accompanying each transmitter.

Section 5. SPECIFICATIONS

VISTA-40 CONTROL

Physical: 12-1/2"W X 14-1/2"H X 3"D

Electrical:

- VOLTAGE INPUT:** Ademco No. 1361 Plug-In Transformer (use 1361CN in Canada) or 4300 transformer (for X-10 installations) rated 16.5VAC, 40 VA.
- ALARM SOUNDER OUTPUT:** 10VDC-13.8VDC, 2.8 amps max., 750mA less aux. current draw (UL1023/UL985 installations).
- AUXILIARY POWER OUTPUT:** 9.6VDC-13.8VDC, 750mA max. For UL installations, the accessories connected to the output must be UL Listed, and rated to operate in the above voltage range.
- BACK-UP BATTERY:** 12VDC, 4AH or 7AH gel cell. YUASA NP4-12 (12V, 4AH) or NP7-12 (12V, 7AH) recommended.
- STANDBY:** 4 hours min. with 750 mA aux. load using 7 AH battery.
- CIRCUIT PROTECTORS:** Thermal circuit breakers are used on battery input to protect against reverse battery connections and on alarm sounder output to protect against wiring faults (Shorts).
A solid state circuit breaker is used on auxiliary power output to protect against wiring faults (shorts).

DIGITAL COMMUNICATOR

FORMATS SUPPORTED:

ADEMCO HIGH SPEED
ADEMCO 4+2 EXPRESS
ADEMCO LOW SPEED
ADEMCO CONTACT ID
SESCOA
RADIONICS LOW SPEED

LINE SEIZE: Double Pole

RINGER EQUIVALENCE: 0.7B

FCC REGISTRATION No.: AC398U-68192-AL-E

- 6128 REMOTE KEYPAD**
- Physical:** 5-3/4" W x 4-3/4" H x 1" D (146mm x 121mm x 26mm)
 - Electrical:** Voltage Input: 12VDC; Current Drain: 30mA
 - Interface Wiring:**
RED: 12VDC input (+) auxiliary power
BLUE: Not Used, if present
GREEN: Data to control panel
YELLOW: Data from control panel
BLACK: Ground and (-) connection from supplemental power supply.
- 6137 REMOTE KEYPAD**
- Physical:** 6-1/4" W x 4-3/4" H x 1" D (159mm x 121mm x 26mm)
 - Electrical:** Voltage Input: 12VDC; Current Drain: 85mA
 - Interface Wiring:** Same as 6128.
- 6139 REMOTE KEYPAD**
- Physical:** 6-1/4" W x 4-3/4" H x 1" D (159mm x 121mm x 26mm)
 - Electrical:** Voltage Input: 12VDC; Current Drain: 100mA
 - Interface Wiring:** Same as 6128.
- 6139AV REMOTE KEYPAD**
- Physical:** 6-1/4" W x 4-3/4" H x 1" D (159mm x 121mm x 26mm)
 - Electrical:** Voltage Input: 12VDC; Current Drain: 200mA
 - Interface Wiring:** See 2-WAY VOICE KEYPADS & AUDIO ALARM VERIFICATION (AAV) section.

CONTACTING TECHNICAL SUPPORT

PLEASE,

Before you call Technical Support, be sure you:

- **READ THE INSTRUCTIONS!**
- **Check all wiring connections.**
- **Determine that the power supply and/or backup battery are supplying proper voltages.**
- **Verify your programming information where applicable.**
- **Note the proper model number of this product, and the version level (if known) along with any documentation that came with the product.**
- **Note your ADEMCO customer number and/or company name.**

Having this information handy will make it easier for us to serve you quickly and effectively.

You may contact Technical Support via Toll-Free FAX. Please include your return FAX number. You will receive a reply within 24 hours. You may also contact Technical Support via modem to ATLAS-BBS, Technical Support's Electronic Bulletin Board System. Replies are posted within 24 hours.

East Coast Technical Support: 1-800-645-7492 (8 a.m.-6 p.m. E.S.T.)

West Coast Technical Support: 1-800-458-9469 (8 a.m.-5 p.m. P.S.T.)

Technical Support FAX Number: 1-800-447-5086

ATLAS-BBS Electronic Bulletin Board System: 1-516-496-3980
(1200 - 9600 Baud, 8 Data Bits, 1 Start/Stop Bit, No Parity)

ATLAS FAX - Automated Fax Retrieval System: 1-800-573-0153
1-516-921-6704/Ext. 1667

ADEMCO World Wide Web Page: [HTTP://WWW.ADEMCO.COM](http://WWW.ADEMCO.COM)

INTERNET E-Mail Address: Ademco_Tech_SPRT@Ademco-165.Ademco.com

WARNING!

THE LIMITATIONS OF THIS ALARM SYSTEM

While this System is an advanced wireless security system, it does not offer guaranteed protection against burglary, fire or other emergency. Any alarm system, whether commercial or residential, is subject to compromise or failure to warn for a variety of reasons. For example:

- Intruders may gain access through unprotected openings or have the technical sophistication to bypass an alarm sensor or disconnect an alarm warning device.
- Intrusion detectors (e.g., passive infrared detectors), smoke detectors, and many other sensing devices will not work without power. Battery-operated devices will not work without batteries, with dead batteries, or if the batteries are not put in properly. Devices powered solely by AC will not work if their AC power supply is cut off for any reason, however briefly.
- Signals sent by wireless transmitters may be blocked or reflected by metal before they reach the alarm receiver. Even if the signal path has been recently checked during a weekly test, blockage can occur if a metal object is moved into the path.
- A user may not be able to reach a panic or emergency button quickly enough.
- While smoke detectors have played a key role in reducing residential fire deaths in the United States, they may not activate or provide early warning for a variety of reasons in as many as 35% of all fires, according to data published by the Federal Emergency Management Agency. Some of the reasons smoke detectors used in conjunction with this System may not work are as follows. Smoke detectors may have been improperly installed and positioned. Smoke detectors may not sense fires that start where smoke cannot reach the detectors, such as in chimneys, in walls, or roofs, or on the other side of closed doors. Smoke detectors also may not sense a fire on another level of a residence or building. A second floor detector, for example, may not sense a first floor or basement fire. Finally, smoke detectors have sensing limitations. No smoke detector can sense every kind of fire every time. In general, detectors may not always warn about fires caused by carelessness and safety hazards like smoking in bed, violent explosions, escaping gas, improper storage of flammable materials, overloaded electrical circuits, children playing with matches, or arson. Depending on the nature of the fire and/or location of the smoke detectors, the detector, even if it operates as anticipated, may not provide sufficient warning to allow all occupants to escape in time to prevent injury or death.
- Passive Infrared Motion Detectors can only detect intrusion within the designed ranges as diagrammed in their installation manual. Passive Infrared Detectors do not provide volumetric area protection. They do create multiple beams of protection, and intrusion can only be detected in unobstructed areas covered by those beams. They cannot detect motion or intrusion that takes place behind walls, ceilings, floors, closed doors, glass partitions, glass doors, or windows. Mechanical tampering, masking, painting or spraying of any material on the mirrors, windows or any part of the optical system can reduce their detection ability. Passive Infrared Detectors sense changes in temperature; however, as the ambient temperature of the protected area approaches the temperature range of 90° to 105°F (32° to 40°C), the detection performance can decrease.
- Alarm warning devices such as sirens, bells or horns may not alert people or wake up sleepers if they are located on the other side of closed or partly open doors. If warning devices are located on a different level of the residence from the bedrooms, then they are less likely to waken or alert people inside the bedrooms. Even persons who are awake may not hear the warning if the alarm is muffled by noise from a stereo, radio, air conditioner or other appliance, or by passing traffic. Finally, alarm warning devices, however loud, may not warn hearing-impaired people.
- Telephone lines needed to transmit alarm signals from a premises to a central monitoring station may be out of service or temporarily out of service. Telephone lines are also subject to compromise by sophisticated intruders.
- Even if the system responds to the emergency as intended, however, occupants may have insufficient time to protect themselves from the emergency situation. In the case of a monitored alarm system, authorities may not respond appropriately.
- This equipment, like other electrical devices, is subject to component failure. Even though this equipment is designed to last as long as 20 years, the electronic components could fail at any time.

The most common cause of an alarm system not functioning when an intrusion or fire occurs is inadequate maintenance. This alarm system should be tested weekly to make sure all sensors and transmitters are working properly. The security keypad (and remote keypad) should be tested as well.

Wireless transmitters (used in some systems) are designed to provide long battery life under normal operating conditions. Longevity of batteries may be as much as 4 to 7 years, depending on the environment, usage, and the specific wireless device being used. External factors such as humidity, high or low temperatures, as well as large swings in temperature, may all reduce the actual battery life in a given installation. This wireless system, however, can identify a true low battery situation, thus allowing time to arrange a change of battery to maintain protection for that given point within the system.

Installing an alarm system may make the owner eligible for a lower insurance rate, but an alarm system is not a substitute for insurance. Homeowners, property owners and renters should continue to act prudently in protecting themselves and continue to insure their lives and property.

We continue to develop new and improved protection devices. Users of alarm systems owe it to themselves and their loved ones to learn about these developments.

WARNING: OWNER'S INSTRUCTION NOTICE NOT TO BE REMOVED WEEKLY TESTING IS REQUIRED TO ENSURE PROPER OPERATION OF THIS SYSTEM.

NOTES: 1. Zone 1 may be selected for EOLR supervised or normally closed (no EOLR) operation via cut jumper. (Cut red jumper for normally closed operation. Do not cut for Fire Usage). Zones 2-8 may be selected for either operation via program field *41.
 2. Zone 1 supports 2-wire smoke detectors.
 3. Zone 7 may be used for remote keyswitch arming/disarming. See Installation Instructions for wiring instructions.
 4. Zone 8 supports 2-wire latching type glass break detectors. See Installation Instructions for recommended type and maximum number of detectors supported.

COMPLIES WITH FCC RULES, PART 68
 FCC REGISTRATION NO. AC398U-68192-AL-E
 RINGER EQUIVALENCE: 0.7B

THIS DEVICE COMPLIES WITH PART 15 OF FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) IT MAY NOT CAUSE HARMFUL INTERFERENCE. (2) IT MUST ACCEPT ANY INTERFERENCE THAT MAY CAUSE UNDESIRABLE OPERATION.

J7 Header
 1. Not Used
 2. Ground-
 3. Out 1 (Ground Start)
 4. Ground-
 5. Out 2 (fire)
 6. Ground-
 7. Out 3 (burg/aud. panic)
 8. Ground
 9. Out 4 (silent panic/duress)

J8 Header
 1. In 2
 2. Ground
 3. In 3 (4300 sync)
 4. In 4 (4300 sync)
 5. Ground
 6. Out 5 (4300 data)
 7. Out 6
 8. Ground
 9. Ground

Optional programming:
 Out 1: Open/close or Keypad-like sounding
 Out 2: Armed LED
 Out 4: Ready LED
 Ratings for Out 1:
 Active: 10VDC-13.8VDC through 4k OHMS
 Not Active: 100 OHMS to ground
 Ratings for out 2-4:
 Active: 10VDC-13.8VDC through 5k OHMS
 Not Active: 1k OHMS to ground

(Refer to Installation Instructions for information concerning Direct Wire Downloading using the 4100SM Serial Module.)

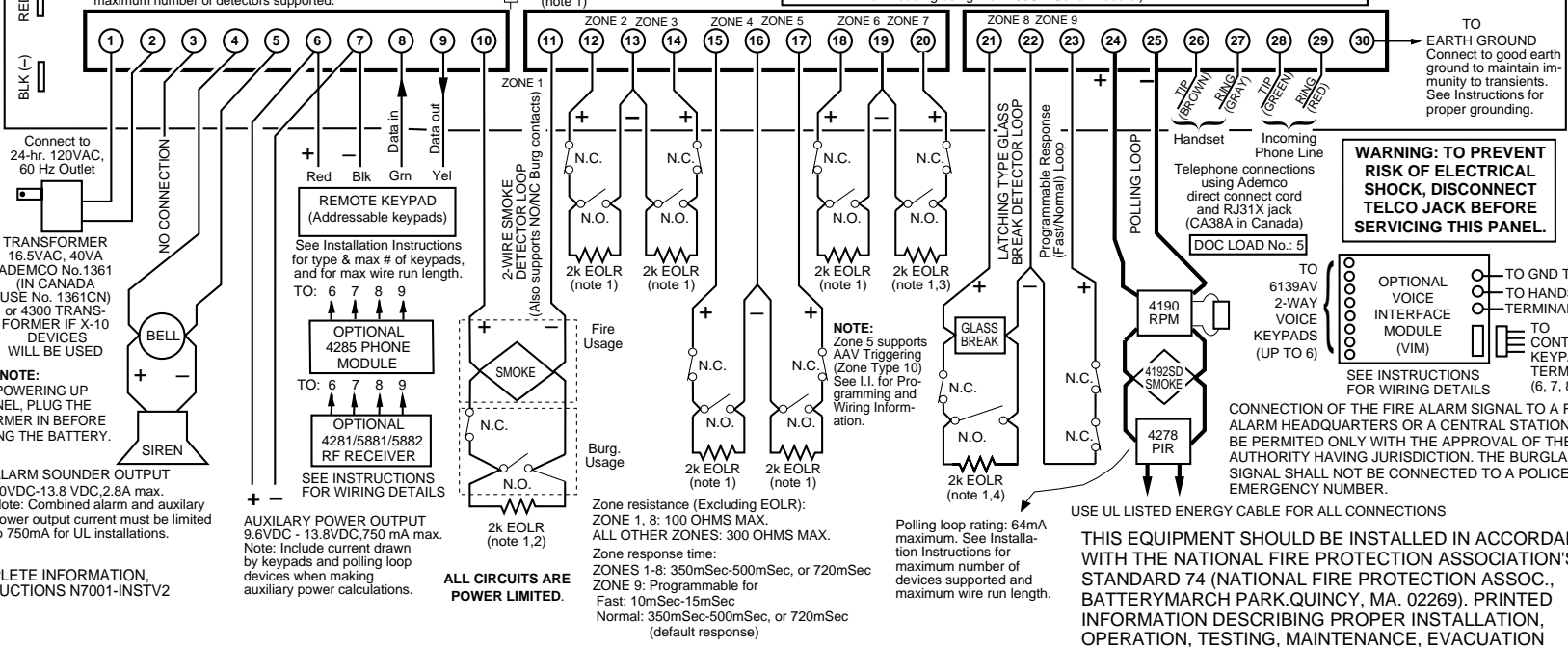
MAKE CONNECTIONS USING No. 4142TR CABLE

TO EARTH GROUND
 Connect to good earth ground to maintain immunity to transients. See Instructions for proper grounding.

Connect to 12VDC, 4AH or 12VDC, 7AH GEL CELL BATTERY

BATTERY TABS
 RED (+)
 BLK (-)

CHARGING VOLTAGE 13.7 VDC
 See Installation Instructions for required battery capacity



VISTA-40 SUMMARY OF CONNECTIONS

ADEMCO LIMITED WARRANTY

Alarm Device Manufacturing Company, a Division of Pittway Corporation, and its divisions, subsidiaries and affiliates ("Seller"), 165 Eileen Way, Syosset, New York 11791, warrants its products to be in conformance with its own plans and specifications and to be free from defects in materials and workmanship under normal use and service for 18 months from the date stamp control on the product or, for products not having an Ademco date stamp, for 12 months from date of original purchase unless the installation instructions or catalog sets forth a shorter period, in which case the shorter period shall apply. Seller's obligation shall be limited to repairing or replacing, at its option, free of charge for materials or labor, any product which is proved not in compliance with Seller's specifications or proves defective in materials or workmanship under normal use and service. Seller shall have no obligation under this Limited Warranty or otherwise if the product is altered or improperly repaired or serviced by anyone other than Ademco factory service. For warranty service, return product transportation prepaid, to Ademco Factory Service, 165 Eileen Way, Syosset, New York 11791.

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. IN NO CASE SHALL SELLER BE LIABLE TO ANYONE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, OR UPON ANY OTHER BASIS OF LIABILITY WHATSOEVER, EVEN IF THE LOSS OR DAMAGE IS CAUSED BY THE SELLER'S OWN NEGLIGENCE OR FAULT.

Seller does not represent that the products it sells may not be compromised or circumvented; that the products will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; or that the products will in all cases provide adequate warning or protection. Customer understands that a properly installed and maintained alarm may only reduce the risk of a burglary, robbery, fire or other events occurring without providing an alarm, but it is not insurance or a guarantee that such will not occur or that there will be no personal injury or property loss as a result. CONSEQUENTLY, SELLER SHALL HAVE NO LIABILITY FOR ANY PERSONAL INJURY, PROPERTY DAMAGE OR OTHER LOSS BASED ON A CLAIM THE PRODUCT FAILED TO GIVE WARNING. HOWEVER, IF SELLER IS HELD LIABLE, WHETHER DIRECTLY OR INDIRECTLY, FOR ANY LOSS OR DAMAGE ARISING UNDER THIS LIMITED WARRANTY OR OTHERWISE, REGARDLESS OF CAUSE OR ORIGIN, SELLER'S MAXIMUM LIABILITY SHALL NOT IN ANY CASE EXCEED THE PURCHASE PRICE OF THE PRODUCT, WHICH SHALL BE THE COMPLETE AND EXCLUSIVE REMEDY AGAINST SELLER. This warranty replaces any previous warranties and is the only warranty made by Seller on this product. No increase or alteration, written or verbal, of the obligations of this Limited Warranty is authorized.

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A DIVISION OF PITTMAY CORPORATION

165 Eileen Way, Syosset, New York 11791

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ADDENDUM TO: VISTA-40 and VISTA 50P/UL Installation Instructions**NEW "QED" DEVICE ENROLLMENT PROCEDURE FOR 5800 SERIES TRANSMITTERS AND SERIAL NUMBER POLLING LOOP DEVICES**

This addendum describes the new procedure for "enrolling" 5800 series transmitters or serial number polling-loop devices into the system. There are two methods of enrolling:

- Enrolling Through Zone Programming
- Enrolling Through Sequential Mode

The Enrolling Through Zone Programming procedure describes how to enroll each wireless transmitter or serial number polling-loop devices into the system as you are entering the zone information. The Enrolling Through Sequential Mode procedure describes how to enroll all the wireless transmitters and/or polling-loop devices into the system *after all zone information has been entered*. Use these procedures in place of the procedures described in the Installation Instructions.

As an option, the new enroll modes allow you to use a 5803 or 5804 **button-type** transmitter as a "program tool." The program tool:

- is used for enrolling 5800 series RF wireless or serial number polling loop devices
- duplicates the * and # key programming functions (left program tool button = *, right = #). You can move to the physical location of the transmitter to be enrolled, press the upper left-hand button of the program tool, and then trip the intended transmitter.
- can also be used as a transmitter in the system. If you plan to use an existing transmitter, it must first be enrolled into the system as its associated zones. You may then program it as the tool.

An alpha keypad is required for the following procedures.

ENROLLING THROUGH ZONE PROGRAMMING (#93)

1. Enter Programming mode [**Installer Code**] + **8 + 0 + 0**. Enter Zone Programming by pressing **#93**. If the system has been set up to use 5800 series RF, and a program tool has already been entered, skip to step 4. If no program tool has been entered, the following prompt will appear:

PROGRAM TOOL? 0 = NO, 1 = YES 0

2. If a program tool is being used, enter "1." If not using a tool, enter "0" and skip to Step 4.

10 INPUT S/N: L Axxx-xxxx

3. If "1" is entered, the system will prompt for the unit's serial number. Enter the program tool's serial number using one of the following methods:

a) Enter the 7 digit serial number for the transmitter

or

b) Press any button on the transmitter. The keypad should beep three times and display the serial number of the tool.

10 PROG AS BR: 3 A123-4567 3

In this example, the serial number is A123-4567. Once enrolled, the upper left-hand button of the program tool can be pressed to ready the system for enrolling a transmitter into the system. Pressing the # key on the keypad will cause the system to back up to the "PROGRAM TOOL ?" prompt.

The serial number for the program tool will only remain in the system until the programming mode is exited. (Entering *97 will not delete the tool.)

Press [*] to continue.

ENTER ZN NO.
00 = QUIT 10

Zone 10 entered ↑

10 Z T P RC IN:L
00 - - - -: -

↓ Zone Number

10 ZONE TYPE
Perimeter 03

Entry for Zone Type 03
shown

- 4. Enter the zone number that you wish to program. As an example, zone 10 is shown here. Press [★] to continue.
- 5. A display will appear, showing a summary of that zone's programming. If the zone is not programmed, the display will appear as shown here. If checking a zone's programming, and it is programmed satisfactorily, press [#] to back up one step and enter another zone number, if desired. Otherwise, press [★] to continue.

- 6. Each zone must be assigned a zone type, which defines the way in which the system responds to faults in that zone. Enter the zone type desired (or change it, if necessary). Available zone types are listed below.

- 00 = Assign For Unused Zones
- 01 = Entry/Exit #1, Burglary
- 02 = Entry/Exit #2, Burglary
- 03 = Perimeter, Burglary
- 04 = Interior Follower, Burglary
- 05 = Trouble Day/Alarm Night
- 06 = 24 Hr Silent
- 07 = 24 Hr Audible
- 08 = 24 Hr Aux
- 09 = Fire
- 10 = Interior Delay, Burglary
- 20 = Arm-Stay*
- 21 = Arm Away*
- 22 = Disarm*
- 23 = No Alarm Response
(EX: Relay activation)

- * These are special zone of types used with 5800 series wireless push-button units which will result in arming the system in the STAY or AWAY mode, or disarming of the system, depending on the selection made.
Press [★] to continue.

10 PARTITION
2

- 7. Enter the partition number you are assigning this zone to.

Press [★] to continue.

10 REPORT CODE
1st 03 2nd 12 3C

- 8. Enter the report code. The report code consists of 2 hexadecimal digits, each in turn consisting of 2 numerical digits. For example, for a report code of "3C", enter [0][3] for "3" and [1][2] for "C."

(Refer to *System Communication* section in the applicable Installation Instructions for more information about report codes and report code formats.)

Press [★] to continue.

10 INPUT TYPE
RF Xmitter 3

- 9. Enter the RF transmitter or serial number polling loop input device type as follows:
3 = RF (supervised RF transmitter)
4 = UR (unsupervised RF transmitter)
5 = BR (button type RF transmitter - unsupervised)
6 = SL (serial polling device)

(Refer to the Installation Instructions for more information about input types.)

Press [★] to continue.

10 LOOP #
1

10. The cursor should now be flashing on the loop number. The default is "1." To accept this, press [★]. If a different loop number is being used on this device, enter the loop number (1-4) and press [★] to continue (see the loop designations for various RF transmitters on page 8 of this addendum). **The loop number must be entered here, whether using Zone Programming or Sequential Mode to "enroll" serial numbers.** If you want to delete the serial number, enter "0" and press [★]. The system will then prompt, "DELETE S/N?" Press the "1" (YES) key to complete the delete sequence. This process deletes the serial number only, *not* the loop number. The assumption is that the proper loop number was programmed, but the wrong serial number was enrolled.

10 LEARN S/N?
1 = YES, 0 = NO 1

11. If the device's serial number has not been previously "enrolled," you may enter the enrollment mode now by either entering "1" (YES) *or* by pressing the upper left-hand button of the program tool. **If using the program tool, move to the physical location of the device to be enrolled before pressing the button.** A single short beep will verify that the button has been pressed. The system will respond to the first serial number transmitted after the [1] key on the keypad or the button of the program tool is pressed. Enter "0" (NO) to enroll later. (If "0" is entered, go to step 14.)

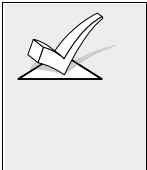
10 INPUT S/N
Axxx-xxxx

12. This prompt is displayed if "1" (YES) is entered in response to the "Learn S/N?" prompt. The serial number may be enrolled by one of two methods:

- a) Enter the 7-digit serial number printed on the transmitter using an alpha keypad
- or
- b) Activate the device by faulting *or* restoring the input you wish to use for that zone (e.g., press a button, open or close a door, etc.).

10 INPUT S/N
A022-4064

The system will enroll the serial number of the first device heard.



If the serial and loop number combination is already present in the system, the keypad will sound a single long beep and display the word "DUPLICATE" along with the serial number, and the number of the zone containing the serial/loop number combination.

13. The system will then enter an optional confirmation mode so that the operation of the actual programmed input can be confirmed. Activate the loop input or button that corresponds to this zone. **We recommend that you confirm the programming of every device before proceeding to the next zone.**

10 CONFIRM RF:1
A022-4064 1

When the system sees activity on the appropriate input, it will beep three times and display the confirmation message.



At any time during this step, you may press the [★] key on the keypad or the upper left-hand button of the program tool if you are satisfied with the serial and loop number combination that has been enrolled, regardless of whether or not the enrolled input has been "confirmed."

If the incorrect device has been enrolled, press the # key on the keypad or upper right-hand button on the program tool to delete the serial number and return to the "LEARN S/N" prompt. A single long beep will be heard from the keypad to verify pressing of the upper right-hand button. Then, press "1" (Yes) or press the upper left-hand button of the program tool (a single short beep will verify the system is ready for enrolling) and re-activate the proper device loop input.

10 ZT P RC IN:L
s 03 1 00 RF:1

14. The summary screen for the zone will appear. Note that an "s" indicates that a serial number has, in fact, been enrolled. Press [★] to accept the zone information.

If you want to delete the serial number, press [#]. This will bring you back to step 8. Press [★] to change input type, loop number, and serial number.



When you have finished programming all zones, test each using the system's TEST mode. Do not use the Transmitter ID Sniffer mode for this, as it will only check for transmission of one zone on a particular transmitter, NOT the zones assigned to each additional loop, and will not verify polling loop type zones.

ENROLLING THROUGH SEQUENTIAL MODE (#93)

(Use this mode only after all other zone information has been programmed, including transmitter loop numbers).

To enroll devices **sequentially**, *after* all other zone information has been programmed, do the following:

1. Enter Programming mode [Installer Code] + 8 + 0 + 0 on an alpha keypad. Enter Sequential mode by pressing #93. Press 0 repeatedly until the "SEQUENTIAL LEARN" prompt is displayed. Enter "1" to enroll a device's serial number. The following prompt will appear:

PROGRAM TOOL?
0 = NO, 1 = YES 0

2. If using a program tool, enter "1." If not using a tool, enter "0." If a tool has already been programmed, this prompt will not appear. If either not using a tool or one has already been programmed, skip to step 4.

00 INPUT S/N: L
Axxx-xxxx

3. If "1" is entered, the system will prompt for the unit's serial number. Enter the program tool's serial number using one of the following methods:

- a) Enter the 7-digit serial number printed on the transmitter
- or
- b) Press any button on the transmitter. The keypad should beep three times and display the serial number of the tool.

00 PROG AS BR:3
A123-4567 3

In this example, the serial number is A123-4567. Once enrolled, the upper left-hand button of the program tool can be pressed to ready the system for enrolling a transmitter into the system.

The serial number for the program tool will only remain in the system until the programming mode is exited. (Entering *97 will not delete the tool.)

Press [*] to continue.

Pressing the # key on the keypad will cause the system to back up to the "PROGRAM TOOL ?" prompt.

TECHNOLOGY TYPE
WIRELESS 0

Default ↑

4. Enter the type of device(s) to be enrolled as follows:

- 0 = Wireless (Default)
- 1 = Polling Loop
- 2 = Both

Press [*] to continue.

ENTER ZN NO.
(00 = QUIT) 10

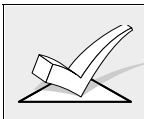
Zone Number Entered ↑

5. Enter the first zone number to be enrolled (e.g., zone 10).

Press [*] to continue.

The system will, starting with this zone number, search for the first device which has **all** of the following attributes pre-programmed in Zone Programming:

- a) **An input type of RF, UR, BR, or SL (if serial polling loop devices enabled) programmed**
- b) **A loop number programmed**
- c) **No serial number programmed**

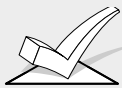


If the first zone number entered does **not** have one or more of the above attributes, the system will search its database for the first zone that does and will display it on the next screen.

10 INPUT S/N
Axxx xxxx

6. This prompt is displayed when the system has found the next zone which needs to be enrolled. The system will respond to the first serial number transmitted after the [*] key on the keypad or the button of the program tool is pressed. A single short beep will verify that the button has been pressed. A serial number may be enrolled by one of two methods:

- a) Enter the 7 digit serial number printed on the device.
- or
- b) Activate the device by faulting or restoring the input you wish to use for that zone (e.g., press a button, open or close a door, etc.).



If you do **not** wish to enroll the zone displayed, press the # key on the keypad or the upper right-hand button on the program tool (a long beep will be heard to verify). The following prompt will appear:

10 LEARN S/N?
0 = NO, 1 = YES 0

To enroll now, enter "1" (YES). If "0" (NO) is entered, the following prompt will appear :

ENTER ZN NUM.
(00 = QUIT) 12

Zone Number Entered ↑

Enter the next zone number to be enrolled (e.g., zone 12). The system will search for that zone and will display the prompt shown in the beginning of step 5. If you wish to exit the enrollment mode completely, enter **00** and press [★].

10 INPUT S/N
A 022-4064

↑
Serial #

The system will enroll the first serial number heard, display the serial numbers, and cause the keypad to beep twice.



If the serial and loop number combination is already present in the system, the keypad will sound a single long beep and display the word "DUPLICATE" along with the serial number, and the number of the zone containing the serial/loop number combination.

- The system will then enter an optional confirmation mode so that the operation of the actual programmed input can be confirmed. Activate the loop input or button that corresponds to this zone. **We recommend that you confirm the programming of every device before proceeding to the next zone.**

10 CONFIRMED SL:1
A022-4064 3

When the system sees activity on the appropriate input, it will beep three times and display the confirmation message. Press [★] or the upper left-hand button of the program tool when you are ready to enroll the next serial number device.




At any time during this step, you may press the [★] key on the keypad or the upper left-hand button of the program tool if you are satisfied with the serial and loop number combination that has been enrolled, regardless of whether or not the enrolled input has been "confirmed." This will ready the system to enroll the next serial number device.

If the incorrect device has been enrolled, press the # key on the keypad or the upper right-hand button of the program tool to delete the serial number and return to the "LEARN S/N" prompt. A single long beep will be heard from the keypad to verify pressing of the upper right-hand button. Then, press "1" (Yes) or press the upper left-hand button of the program tool (a single short beep will verify the system is ready for enrolling) and re-activate the proper device or device loop input.


8. The system will search for the next zone that does not have a serial number associated with it. If one is found, the prompt in step 5, along with the appropriate zone number, will be displayed. Follow steps 5 and 6 for the remaining zones.

After all zones have been displayed, whether enrolled or not, the "ENTER ZN NO." prompt will appear. Enter "00" to exit the Sequential mode and return to data field programming mode.

	When you have finished programming all zones, test each using the system's TEST mode. Do not use the Transmitter ID Sniffer mode for this, as it will only check for transmission of one zone on a particular transmitter, NOT the zones assigned to each additional loop, and will NOT verify polling loop type.
---	---

RF SERIAL NUMBER CLEAR MODE (#93)

This mode may be used in the event that an undesired transmitter has been enrolled during sequential enrolling, causing each subsequent serial number to be assigned to an incorrect zone. Performing this operation will delete all RF serial numbers, leaving all other zone information intact. You may then return to Sequential mode to re-enroll wireless transmitters.

	The RF Serial Number Clear mode will not delete polling loop serial numbers.
---	---

To clear all RF wireless serial numbers, do the following:

1. Enter Programming mode [**Installer Code**] + **8 + 0 + 0** on an alpha keypad. Enter RF Serial Number Clear mode by pressing **#93**. Press **0** repeatedly until the "CLEAR RF SERIAL #?" prompt is displayed as follows:
2. Enter "1" to clear all RF wireless serial numbers. The "ARE YOU SURE?" prompt is displayed as follows:
3. Enter "1" to clear all RF serial numbers. Re-enter the Sequential mode to enroll wireless transmitters.

CLEAR RF SERIAL#? 1 = YES, 0 = NO 0
--

ARE YOU SURE? 1 = YES, 0 = NO 0

5800 Series Transmitter Input Loop Identification

- All of the transmitters illustrated below have one or more unique factory assigned input (loop) ID codes. *Each of the inputs requires its own programming zone* (e.g., a 5803's three inputs require three programming zones).
- Transmitter inputs entered as:

"RF" (Supervised RF) Type send periodic check-in signals, as well as fault, restore and low battery signals. The transmitter must remain within the receiver's range.

"UR" (Unsupervised RF) Type send all the signals that the "RF" Type does, but the control does not supervise the check-in signals. The transmitter may, therefore, be carried off-premises.

"BR" (Unsupervised Button RF) Type only send fault signals. They do not send restore, check-in, or automatic low battery signals. The transmitter may be carried off-premises.

